

BALTIMORE CITY

CRITICAL AREA

MANAGEMENT PROGRAM

City of Baltimore
Department of Planning



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NOTE: THE 1995 APPENDICES, WHICH WERE USED AS EARLY ORGANIZING DOCUMENTS FOR THE CAMP PROGRAM, HAVE BEEN REMOVED FROM THE NEW MANUAL. THESES APPENDICES ARE AVAILABLE AT THE DEPARTMENT OF PLANNING.



CRITICAL AREA MANAGEMENT PROGRAM

—— 1,000 Foot Boundary



North

I. CHESAPEAKE BAY CRITICAL AREA GENERAL INFORMATION

A. Introduction

The Chesapeake Bay Critical Area Act (Section 8-1801 et. Seq., Natural Resources Article, Annotated Code of Maryland) establishes the State of Maryland Chesapeake Bay Critical Area Commission and requires that the City of Baltimore prepare and adopt a Critical Area Management Program to protect and improve the shoreline habitat and tidal waters of the Chesapeake Bay and its tributaries. All land uses within 1,000 feet of the shore (the Critical Area) must be regulated to:

1. Minimize the adverse impact on water quality caused by water running off the land and;
2. Conserve fish, plants and wildlife habitat while accommodating growth.

The City of Baltimore Critical Area Management Program may be referred to as the “CAMP”.

B. Purpose and Intent

The Maryland State Critical Area Regulations (COMAR 27.01.01-27.03.01) establish Criteria, which the City’s CAMP must meet. Among other things, they require that new development and redevelopment reduce pollutants running off the land by 10%, and that plant and animal habitat be protected and improved.

The habitat protection elements require that a 100-foot Buffer be established along the shoreline to protect existing, naturally vegetated areas or areas planted and managed to protect shoreline and nearby water habitats.

II. GENERAL DEVELOPMENT REQUIREMENTS

A. Applicability

The Chesapeake Bay Critical Area Act requires each local jurisdiction to include, as part of its local management program, provisions to guide and restrict new development and redevelopment (“development” hereinafter) in such a way as to minimize stormwater runoff pollution and to preserve and enhance natural habitat within the Critical Area. This section summarizes the requirements that must be met by development projects. Details about these requirements and the review process can be found in this Manual and the City of Baltimore Stormwater Management Design Manual, available in the City’s Department of Public Works.

B. Project Review

1. Public Actions That Trigger Critical Area Review:

Development in the Critical Area will be subject to Critical Area requirements only when, and at each time that, the development activity requires one or more of the public actions listed below:

- a) Subdivision
- b) Rezoning
- c) Zoning Variance
- d) Conditional Use or Special Exception
- e) Building/Grading Permit

2. When is a development project subject to Critical Area development requirements?

Once the Critical Area review process is triggered by one of the above public actions, the project will be evaluated by the Department of Planning to determine whether the proposed development is “significant development,” so as to be subject to the provisions set forth herein.

“Significant” development is defined as development which has one or more of the following characteristics:

- a) Disturbs land in the Buffer;*
- b) Disturbs 10,000 or more square feet of land in the Critical Area;

- c) Results in any disturbance, caused by use, development, or destruction of vegetation, to land in an area designated under the Critical Area Management Program as a Habitat Protection Area; or
- d) Involves expenditure for improvements to the property equal to or greater than 50% of the Base Full Cash Value (from the City's Real Property system) of the property, as certified by the Department of Planning.

If a development is deemed "significant," an applicant must meet all the requirements of the Critical Area Program; plans, worksheets and other requirements are listed in Section X. Materials Needed for Compliance.

*The Buffer is always a Habitat Protection Area (HPA)

Advisory Notes:

"Improvements" means all physical improvements to the land or structures. Does not include consultant fees, portable equipment (restaurant ranges, moveable brewery equipment, etc.)

"Site Acreage" (For Worksheet A)

The entire site must be included in the "Site Acreage" portion of the Worksheet A for calculating the 10% Pollutant Removal Requirements. These include not only areas that are graded with a bulldozer or other earthmoving equipment, but also:

- All existing impervious areas in the Limit of Disturbance
- Buffer Offset fees are not required when a parking lot is repaved in the Buffer if the site is grandfathered. This is also the case for grandfathered buildings. (See "Grandfathering" and "Offsets Program")
- Piers-the over the water portion of public and private piers must be included in the 10% calculations. Wooden, slatted piers are considered pervious.
- Buffer fees must be paid for development on piers that are not covered by a Promenade Easement Agreement.

C. Prohibited Uses in Intensely Developed Areas (IDA)

The following uses are prohibited. Existing prohibited uses are grandfathered if they existed before January 4, 1988. Any expansion of these grandfathered uses

must meet the standards of the Zoning Code for non-conforming uses. Prohibited uses are as follows:

1. Within the Buffer:
 - a) Ancillary storage facilities for toxic or hazardous substances or nutrients;
 - b) Open storage facilities for any bulk solid or semi-solid material which is a toxic or hazardous substance or nutrient or becomes such when left to stand or exposed to water;
 - c) Outdoor facilities for the maintenance, storage or dismantling of abandoned, unlicensed; junked or derelict vehicles;
 - d) Sand or gravel operations;
 - e) Cement plants;
 - f) Chemical plants.
2. Overall Critical Area:
 - a) Solid or hazardous waste collection or disposal facilities;
 - b) Sanitary landfills;
 - c) Materials recovery facilities;
 - d) Waste disposal (except garbage) for land fill and land reclamation;
 - e) Junk or scrap-storage and yards;
 - f) Radioactive waste handling;
 - g) Incinerators, commercial or municipal;
 - h) Recycling collection stations;
 - i) Transfer stations;
 - j) Hazardous material: handling and storage.

Any use, which lawfully exists or has been approved by the Board of Municipal and Zoning Appeals as of the date of the enactment of this ordinance shall be considered grandfathered.

D. Structures on Piers or Barges

Pursuant to Natural Resources Article, Title 8, subtitle 18, Annotated Code of Maryland as amended, no building permit shall be issued for any project involving the construction of a dwelling unit or other non-water dependent structure on a pier waterward of the mean high waterline of tidal streams, waters or wetlands within the Critical Area except as provided in subsection 1808.4 of said subtitle. Non-water-dependent structures include, but are not limited to,

dwelling units, restaurants, shops, other commercial buildings and recreational areas; swimming pools; sheds or storage buildings; parking lots; and sanitary facilities.

Piers, which have been approved by MDE for non-water dependent uses: Belt's Wharf, Northshore, and two piers at Harborview.

Barges that have been approved by the City for non-water dependent uses: Lighthouse Point boat sales barge, Harborview swimming pool barge, Tidewater Marina office barge and the proposed restaurant barge at the Power Plant.

In addition, non-water dependent uses in tidal waters are not permitted on barges located in the City of Baltimore. A barge is defined as a non-self propelled vessel excluding historic museum vessels. Uses on barges approved as of the original date of the enactment of this legislation are considered grandfathered. Uses that are accessory to a water-dependent use are allowed; such as fuel pumps and septic system pump out stations.

NOTE:

All piers and barges must also comply with appropriate State and Federal rules and regulations.

E. Criteria for Small Sites and Derelict Buildings

Critical Area compliance costs for reducing the stormwater pollution by 10% on small lots can be significant and out of proportion to the cost of the overall development and construction process. Construction on existing structures on residential lots less than 1,500 square feet and commercial lots less than 2,000 square feet can activate Critical Area requirements with the 50% assessment criteria (B-2-d above). In these cases, the engineering fees can cost more than the mitigation or the offset fees, therefore, the following special provision will apply to these projects:

a) Residential projects:

Development activities on existing structures for residential use outside of the 100-foot Buffer on sites less than 1,500 S.F. do not pay offset fees even if the project activates the 50% assessment criteria. This does not apply to new subdivisions or new construction.

b) Non-residential projects:

Development activities on existing structures in Residential, Office-Residential and Business zoning districts for commercial use outside of the 100-foot Buffer on sites less than 2,000 S.F. do not pay offset fees even if the project activates the 50% assessment criteria. This does not apply to new subdivisions or new construction.

F. Criteria for Brownfield Sites

Brownfields are “abandoned, idled, or underused industrial or commercial facilities where expansion and redevelopment is complicated by real or perceived contamination.” (U.S. EPA). Because many of these sites are in the Critical Area and because these sites are undergoing clean up that the City wishes to encourage, the City of Baltimore will work closely with developers to redevelop these sites; special provisions are applied to these sites.

To be considered a Brownfield, a site must be eligible for and participating in the Maryland Department of the Environment Brownfield Voluntary Cleanup Program (BVCP). Listed below are criteria for development of these sites:

1. If a paved/capped area is required as part of the Brownfields mitigation, that paving/capping is temporarily exempt from Critical Area fees;
2. The Brownfields property will remain exempt and payments deferred until a portion of the site is re-used, requiring a new occupancy permit or building permit. The property owner shall be required to provide a letter to the Planning Department explaining that they understand this deferment and will convey this requirement to prospective buyers or tenants of the property;
3. When the building or occupancy permit application process is started, the site will have to comply with Critical Area regulations. Only if the capped/paved portion of the site is re-used as part of the new use or re-development will all Critical Area requirements have to be met for that portion of the site;
4. At the time the building or occupancy permit is requested, the stormwater quality standards must be met.

5. If more than 50% of a project is in the Buffer, the following shall apply and the following goals shall remain applicable:
 - a) The project should minimize impact on the Buffer whenever possible;
 - b) If there is a vegetated shoreline, it should be protected to the greatest extent possible;
 - c) The Buffer fee may be 50% of the calculated Buffer fee (\$2.50 a square foot). See section V-H.
6. Brownfield expenses should not be used in calculating the total development costs for a project for the 2% maximum Buffer Offset Fee cap.

G. Compliance with Other City Ordinances:

1. City of Baltimore Code requirements:

All development located in the Critical Area shall comply with all the applicable provisions of the City Code, Edition 2000. This includes, but is not limited to:

- Article 7-Natural Resources-Stormwater Management
- Article-Zoning-Section 8-301 to 8-322– Critical Area Overlay District
- Article 32-Building Code-Section 432 – Chesapeake Bay Critical Area Development

2. Compliance with the City of Baltimore Stormwater Management regulations

Developers in the Critical Area are required to comply with all existing City of Baltimore stormwater management regulations for both quantity and quality. All significant development subject to Critical Area review must meet the minimum 10% pollution reduction requirement on-site or the developer must pay an offset fee. Procedures for permits, inspection, performance bonding, maintenance, appeals, and penalties are explained in the Stormwater Management Design Manual. (Available at the Department of Public Works, General Services Division, Second Floor,

Abel Wolman Building, 200 North Holliday Street or call 410-396-4840.) Grants of waivers, exceptions or variances from Stormwater Management requirements may not apply to requirements for meeting the Critical Area pollution reduction requirements.

The Stormwater Management Design Manual provides guidelines for runoff pollution reduction in the Critical Area. The Manual also includes an assessment methodology for evaluating pollutant removal effectiveness of stormwater management facilities, and instructions for review and approval of runoff pollution reduction plans. The Department of Public Works will administer the review and approval process.

H. CAMP Marina Requirements

1. New or Expanded Marinas

With respect to new marinas, and expanded or altered existing marinas; marina developers and operators are required to effectuate certain environmental offsets and Best Management Practices (BMP's).

To meet the CAMP marina requirements, developers/operators are required to provide pump-outs as listed in COMAR Regulations and/or pay into an offset fund.

- a. Marina developers and operators are required to install, maintain and operate year-round, sanitary pump-out facilities. Such facilities shall be constructed in conformity with the provisions of the Environment Article, Annotated Code Maryland, Sec. 9-333 as amended.
- b. For marinas with boatlift facilities, marina developers and operators are required to install, maintain and operate devices for the interception of boat-bottom wash-waters whenever a marina offers pullout, lifts or bottom-cleaning facilities or services. The discharge of any boat-bottom wash-waters into the harbor will be allowed only in the event that the operator has obtained a valid National Pollution Discharge Elimination System (NPDES) permit (if required) and provided that all such waters are properly treated prior to discharge.

2. Marina Mitigation Offset Program

Developers/operators who choose to contribute to the Marina Mitigation Offset Program are required to make payment prior to the issuance of any Building or Use and Occupancy permits for the facility. The amount of the fee will be based on a formula approved by the Board of Estimates.

3. **Marina Master Plan**

All marinas must also comply with the City of Baltimore's Marina Master Plan. For information on the Marina Master Plan, please call the Department of Planning.

III. DEVELOPMENT IN THE CRITICAL AREA IN INTENSELY DEVELOPED AREAS (IDA)

A. Designation of Development Areas

The City is further required by the State Critical Area Act to differentiate sub-areas within its Critical Area according to land use types and densities that existed at the time of program development. These areas are subject to different guidelines and restrictions governing new development and redevelopment. The Critical Area Regulations (COMAR 27.01.02) establish three land use classifications, which are designed to accommodate growth in such a manner as to conserve habitat and protect water quality. The three development areas are:

- 1) Intensely Developed Areas (IDA);
- 2) Limited Development Areas (LDA);
- 3) Resource Conservation Areas (RCA)

The land within the City's Critical Area falls into two of the three categories outlined in the Critical Area Act; Intensely Developed Areas and Resource Conservation Areas. Baltimore has no Limited Development Areas. While the vast majority of the City's Critical Area falls into the category of Intensely Developed Areas, the diversity of existing land uses in this sub-area necessitates that the City further differentiate this sector of its Critical Area. The resulting areas are described below:

B. Waterfront Revitalization Areas

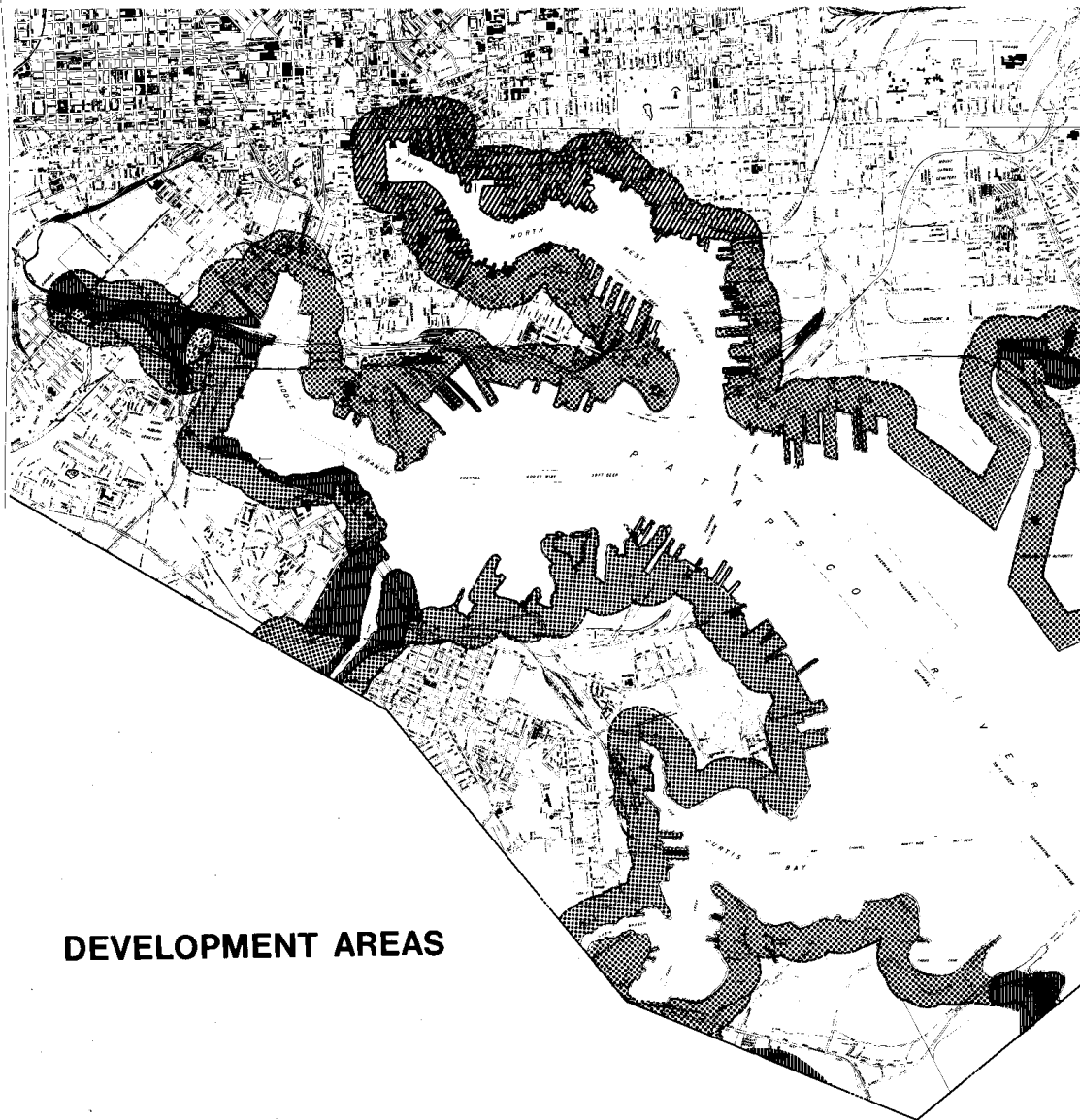
1. Description

The Waterfront Revitalization Area (WRA) is one of two sub districts within the Intensely Developed Area and is undergoing rapid redevelopment. This area is comprised of approximately 616.6 acres, or 12.7% of the land area of the City's Critical Area. The area extends from the Harborview property and proceeds clockwise around the harbor to the intersection of Boston and Clinton Streets in Canton. The intensity of use, extensive storm drain system and bulkheaded shores preclude the habitat and stormwater filtering benefits of the Buffer. In addition, a hard-edged urban public promenade is being expanded along the full length of the area.

2. Requirements for Waterfront Revitalization Areas

a. Requirements for runoff pollution reduction:

The developer is required to meet the 10% runoff pollution reduction requirement for stormwater. This reduction may be accomplished on-



DEVELOPMENT AREAS

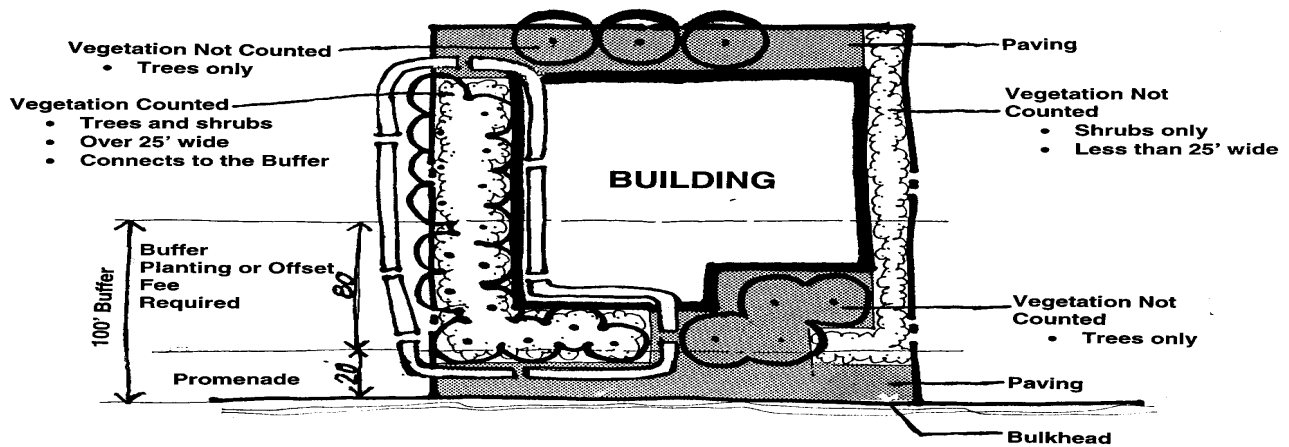
- RESOURCE CONSERVATION AREAS
- REVITALIZATION AREAS
- INDUSTRIAL AREAS

site either by installing an adequate stormwater best management practice for pollutant removal or by restoring vegetation on a portion of the site. These requirements shall be met on-site unless it would be infeasible due to site conditions. The developer is required to offset for any remaining pollution reduction necessary to meet the 10% standard.

b. Requirements for Buffer establishment:

The Buffer means a naturally vegetated area or vegetated area established or managed to protect aquatic, wetland, shoreline, and terrestrial environments from man-made disturbances. The Buffer shall be established 100-feet landward from the mean high water line of tidal waters, and the landward edge of tidal wetlands, and the edge of tributary streams.

HYPOTHETICAL LANDSCAPE PLAN*



*Waterfront Revitalization Area

A developer who encroaches upon the Buffer in the Intensely Developed Areas (IDA) is required to plant vegetation on as much of the Buffer (i.e., total land area within the site which lies 100 feet or less from mean high tide or the edge of tidal wetlands, or tributary streams, exclusive of the public pedestrian promenade easement) as possible based on site conditions. Properly vegetated areas within the Buffer portion of the site may be counted against the developer's Buffer establishment requirement. In addition, properly vegetated areas outside the Buffer may be credited toward the Buffer requirement provided they are contiguous to vegetated areas within the Buffer and are not less than 25 feet in width and depth. All of this is based on site conditions, habitat and water quality goals of the CAMP.

3. Buffer Offset Fund and the Promenade

For any portion of the Buffer, which is not vegetated in an approved manner, the developer is required to contribute to the Buffer Offset Fund or otherwise offset for any development in the Buffer. All privately owned lands within the Buffer for which the developer agrees to grant a public pedestrian access easement approved by the Board of Estimates, are excluded from this requirement. Thus, the portion of any site, which has been dedicated for the public pedestrian or access to the promenade, will be excluded when calculating the net Buffer land area for given development site (i.e., 100 feet back from the water's edge, minus the promenade easement). (See Section V, H -1-)

4. Additional Provisions for the Buffer:

In Waterfront Revitalization Areas, total liabilities for Buffer offsets shall not exceed 2% of the cost of the proposed development. Documentation of the total development costs shall be provided to the Department of Planning as part of the Critical Area project review. The Director of Planning shall make the final determination of the accuracy of this documentation. This provision shall not apply to a Designated Habitat Protection Area (DHPA) where the Director of Planning determines that significant vegetation would be disturbed or displaced by the proposed development or use. The same is true for Waterfront Industrial Areas (see below).

5. Tree Replacement

Within the Waterfront Revitalization Areas of the City of Baltimore, any tree or woody plant defined as having one or several self-supporting stems or trunks and numerous branches may not be cut, removed or destroyed unless approved in advance by the Director of Planning. Any such tree or woody plant cut, removed or destroyed must be replaced and maintained by the property owner. Replacement of all such trees or woody plants shall be on a 1:1 basis where the combined total caliper of the replacement trees equals the combined total caliper of the trees displaced. Any tree cut, removed or destroyed without prior approval must be replaced and maintained on a 2:1 basis. Any tree or woody plant cut in the Buffer, regardless, must be replaced on a 3:1 basis.

Any plan must have the prior written approval of the Director of Planning. No occupancy permit shall be issued until the tree replacement has been completed or until an escrow account or non-revocable letter of credit has been established in the name of the Mayor and City Council of Baltimore. Such account shall be for an amount equal to the total estimated cost of the tree replacement or mitigation plan plus 40% for contingencies and project management fees in the event that the developer fails to implement the plan.

(Tree definition taken from the City of Baltimore supplement to the State Forest Conservation Manual dated October 2, 1992).

C. Waterfront Industrial Areas

1. Description

The Waterfront Industrial Area (WIA) is the second sub-district in the Intensely Developed Area and has generally fewer structures than the Waterfront Revitalization Area (with the exception of some very small parcels) and will often have the ability to meet the Critical Area requirements on site. These requirements can often be met by reconfiguring existing parking areas. A large amount of the City's industrially zoned land lies within this area, which has long been developed for port related purposes. This portion of the City's IDA is comprised of 3,795.4 acres, or 78.4% of the City's Critical Area. The City is encouraging the redevelopment of this area as part of its citywide effort to retain local jobs and industry. Due to the current low demand for port-related facilities, however, the City must accept some non-water-

dependent redevelopment as well as port-related redevelopment as part of its overall strategy for industrial redevelopment.

2. Requirements for Waterfront Industrial Areas

a. Requirements for runoff pollution reduction:

The developer is required to meet the 10% runoff pollution reduction requirement for stormwater. The reduction may be accomplished on-site either by installing an adequate stormwater best management practice for pollutant removal or by restoring vegetation on a portion of the site as specified in Article 7-Natural Resources of the City of Baltimore Code (Edition 2000) and the City of Baltimore and the State of Maryland Stormwater Management Design Manual. These requirements shall be met on-site unless the Director of Planning determines that it would be infeasible due to site conditions. The developer is required to offset for any remaining pollution reduction required to meet the 10% standards.

b. Requirements for Buffer establishment:

Critical Area requirements for development in the Buffer vary depending on whether the development activity is a water-dependent use or not.

(i) Development within the Buffer for a Water-Dependent Use:

This requires that the developer offset only for the land area within the Buffer, which has been disturbed for new construction, or paving associated with the water-dependent use. The developer is required to compensate (either on-site or through the offset program) for any existing vegetation disturbed by the development and to correct any shore erosion problems.

(ii) Development within the Buffer for a Non-Water-Dependent Use:

Development within the Buffer of the designated Waterfront Industrial Area for a non-water-dependent use is limited to 50% of the total Buffer area. Whenever a developer uses any portion of the Buffer as part of a significant development, the developer has the option of: 1) vegetating on-site so that 50% of the total Buffer area is established in vegetation in an approved manner, or 2) contributing to the Buffer Offset Fund an amount equal to the total Buffer area of the site which is not vegetated. In addition, the developer is required to further mitigate (either on-site or through the offset program) for any vegetation disturbed by development and to correct any shore erosion problems.

c. Sites with Buffer constraints:

On sites where the Buffer comprises 15% or more of the entire development site, the developer is allowed to develop within the Buffer providing that he or she offsets for the portion of the Buffer disturbed by such development. This provision shall not apply to Resource Conservation Areas and all Habitat Protection Areas where the Director of Planning has determined that significant vegetation exists.

d. Additional Provision:

Within the Waterfront Industrial Area, total liability for Buffer offsets shall not exceed 2% of the cost of the proposed development. Documentation of the total development costs shall be provided to the Department of Planning as part of the Critical Area project review. The Director of Planning shall make final determination of the accuracy of this documentation. This provision shall not apply to a Habitat Protection Area where the Director of Planning determines that significant vegetation would be disturbed or displaced by the proposed development or use

For additional information on Buffers, see Section V, H-1-5.

3. Tree Replacement

Within the Waterfront Industrial Areas of the City of Baltimore, any tree or woody plant having one or several self-supporting stems or trunks and numerous branches may not be cut, removed or destroyed unless approved by the Director of Planning. Any such tree or woody plant must be replaced and maintained by the property owner. Replacement of all such trees or woody plants shall be on a 1:1 basis where the combined total caliper of the replacement trees equals the combined total caliper of the trees displaced. Any tree cut, removed or destroyed without prior approval must be replaced and maintained on a 2:1 basis. Any tree or woody plant cut in the Buffer, regardless, must be replaced on a 3:1 basis.

Any tree replacement plan must have the prior written approval of the Director of Planning. No occupancy permit shall be issued until the tree replacement has been completed or until an escrow account or non-revocable letter of credit has been established in the name of the Mayor and City Council of Baltimore. Such account shall be for an amount equal to the total estimated cost of the tree replacement or mitigation plan plus 40 percent for contingencies and project management fees in the event that the developer fails to implement the plan.

(Tree definition taken from the City of Baltimore supplement to the State Forest Conservation Manual dated October 2, 1992).

IV. DEVELOPMENT IN RESOURCE CONSERVATION AREAS (RCA)

A. Description

The remainder of the City's Critical Area falls into the "Resource Conservation Area" category. Comprised of 431.5 acres, this sub-area represents 8.9% of the land area of the City's Critical Area. The Resource Conservation Area is almost exclusively floodplain areas and shoreline parks.

B. Requirements for Resource Conservation Areas

1. Impervious Surfaces Limitation

- a. Except as otherwise provided below, man-made impervious surfaces shall be limited to 15% of a parcel or lot in the Resource Conservation Area;
- b. If a parcel or lot one-half acre or less in size existed on or before December 1, 1985, then man-made impervious surfaces are limited to 25% of the parcel or lot;
- c. If a parcel or lot greater than one half acre and less than one acre in size existed on or before December 1, 1985, then impervious surfaces are limited to 15% of the parcel or lot;
- d. If an individual lot one-acre or less in size is part of a subdivision approved after December 1, 1985, then man-made impervious surfaces of the lot may not exceed 25% of the lot. However, the total of the impervious surfaces over the entire subdivision may not exceed 15%;
- e. Impervious surface limits provided in sub-sections (a) and (c) above may be exceeded, upon findings by the Director of Planning or their designee that the following conditions exist:
 - (i) New impervious surfaces on the property have been minimized;
 - (ii) For a lot or parcel one-half acre or less in size, total

impervious surface area does not exceed the impervious surfaces in (a) through (c) above by more than 25% or 500 square feet, whichever is greater;

- (iii) For a lot or parcel greater than one-half acre in size and less than one acre in size, total impervious surface area does not exceed impervious surface limits in (a) through (c) above or by 5,445 square feet, whichever is greater;
- (iv) Water quality impacts associated with runoff from new impervious surfaces can be and have been minimized through site design considerations or the use of best management practices approved by the local jurisdiction to improve water quality;
- (v) The property owner performs on-site mitigation to offset potential adverse water quality impacts from the new impervious surfaces; or the property owner pays a fee in lieu of performing the on-site mitigation. The amount shall be \$2.50 per square foot of new impervious surface area on the property. All fees collected under this provision will be used to fund projects that improve water quality within the Critical Area, consistent with the CAMP.

2. Variances

Variances from these provisions may be requested in accordance with the provisions established in this CAMP.

3. Requirements for development outside the Buffer

Any significant development outside the Buffer shall be limited to open space and public natural resource oriented recreational, cultural and educational facilities. Any significant development outside the Buffer, which results in a vegetated area being disturbed by an impervious surface, requires an offset for the total vegetated area displaced by such development. In no case may the overall acreage of forest or woodland within these areas be decreased by such development.

4. Requirements for development within the Buffer

Development within the Buffer of the Resource Conservation Areas is limited to areas for passive recreation, such as nature study and education- but service facilities for these areas must be located outside of the Buffer. The developer is required to offset 3:1 for the total Buffer area disturbed by development.

5. Tree Replacement

Within the Critical Area of the City of Baltimore, any tree or woody plant having one or several self-supporting stems or trunks and numerous branches may not be cut, removed or destroyed unless approved in advance by the Director of Planning. Any such tree or woody plant cut, removed or destroyed must be replaced and maintained by the property owner. Replacement of all such trees or woody plants shall be on a 3:1 basis where the combined total caliper of the replacement trees equals the combined total caliper of the trees displaced. Any tree cut, removed or destroyed without prior approval must be replaced and maintained on a 3:1 basis.

Any tree replacement plan must have the prior written approval of the Director of Planning. No occupancy permit shall be issued until the tree replacement has been completed or until an escrow account or non-revocable letter of credit has been established in the name of the Mayor and City Council of Baltimore. Such account shall be for an amount equal to the total estimated cost of the tree replacement or mitigation plan plus 40 percent for contingencies and project management fees in the event that the developer fails to implement the plan.

(Tree definition taken from the City of Baltimore supplement to the State Forest Conservation Manual dated October 2, 1992).

V. SUPPLEMENTAL INFORMATION FOR THE CRITICAL AREA

A. Other Critical Area Requirements

The Critical Area Act requires the City to identify existing natural resources in and around the Critical Area and establish provisions for protecting and enhancing these resources. In Section VI specific resource and environmental concerns are briefly described, including resource protection, wildlife habitat, water quality and shore erosion control.

In an effort to expand public awareness of problems threatening the Chesapeake Bay and to promote greater public enjoyment of the Bay and its surrounding environment, the Critical Area Act requires local jurisdictions to include in their local management programs provisions for enhanced public education on environmental issues and to promote greater public access to the Bay.

From the inception of this Act, the Maryland State Legislature has been mindful of the need for continued growth and development within the State's Critical Area and thus has included provisions for controlled and environmentally sensitive new development and redevelopment along the shoreline of the Bay. Identifying the need for growth and economic development as an important State resource, the Act requires that each jurisdiction identify locations within the Critical Area suitable and necessary for the development and redevelopment of water-dependent uses. Section III briefly describes the City's industrial and development needs within the present economic climate and details the City's requirements for meeting those needs while providing for significant improvements to water quality and habitat. This section describes the Offset Programs, which offer certain alternative means of compliance with Critical Area requirements.

Finally, the Critical Area Act requires that each jurisdiction establish administrative procedures for implementing a local development review process. These procedures must include provisions for interagency coordination, enforcement and appeals. The materials needed for compliance for Baltimore's Critical Area Management Program are described in Section X.

B. Growth Allocation

The Critical Area Act provides for a limited expansion of the City's Intensely Developed Area, provided that such expansion is limited to 5% of the total

acreage within the City's Resource Conservation Area (431.5 acres) and also provided that no more than half the allocated expansion is located in the Resource Conservation Area. As a consequence, the City may convert 21.58 acres of land that is now designated as Resource Conservation Area into Waterfront Industrial Area (Intensely Developed Area).

Note: The City has already changed 13.15 acres of RCA to IDA, so only 8.43 acres of the 21.58 acres of growth allocation remains.

C. Grandfathering

1. Continuation of existing uses:

The City shall permit the continuation, but not necessarily the intensification or expansion, of any use in existence on the date of program approval, unless the use has been abandoned for more than one year or is otherwise restricted by existing local ordinances. If any existing use does not conform to the provisions of the program, its intensification or expansion may be permitted only in accordance with the variance procedures outlined in this ordinance and COMAR 27.01.11.

In addition, any buildings existing in the Buffer prior to January 4, 1988 will not be required to pay a Buffer Offset fee, as long as the development activity is within the building. This is also true if the development activity meets or exceeds 50% of the assessed full base cash value of the property (see General Development Requirements). Expansion beyond the existing building must be addressed with the regulations listed in this manual.

2. Density:

Except as otherwise provided, the City shall permit the types of land described in the following subsections to be developed in accordance with density requirements in effect prior to adoption to the CAMP notwithstanding the density provisions of the program. The City shall permit a single-lot or parcel of land that was legally of record on the date of program approval to be developed with a single-family dwelling if a dwelling is not already placed there (notwithstanding that such development may be inconsistent with the density provisions of this ordinance) provided that:

- a. It is on land where development activity has progressed to the point of the pouring of the foundation footings or the installation of structural members.
- b. It is a legal parcel of land, not being part of a recorded or approved subdivision, that was recorded as of December 1, 1985, and land that was subdivided into recorded, legally buildable lots, where the subdivision received the City's final approval prior to June 1, 1984, if:
 - (i) At the time of development, the land is brought into conformance with the Critical Area program insofar as possible, including the consolidation or configuration of lots not individually owned or the procedures are approved by the Critical Area Commission; or
 - (ii) The land has received a building permit subsequent to December 1, 1985, but prior to the local program approval.
- c. Is on land that was subdivided into recorded, legally, buildable lots, where the subdivision received the City's final approval between June 1, 1984 and December 1, 1985; and
- d. It is on land that was subdivided into recorded, legally buildable lots, where the subdivision received the final approval after December 1, 1985, and provided that either development of any such land conforms to the IDA or RCA requirements in this CAMP or the area of the land is counted by the City against the growth allocation permitted through the City's CAMP.
- e. Nothing in this section may be interpreted as altering any requirements for development activities set out in the water-dependent facilities section or the habitat protection section of this manual.

D. Buffer Establishment Credit for Vegetation Planted Outside the Buffer

New vegetation planted outside the Buffer may be credited toward development requirements for vegetation within the Buffer provided that: 1) vegetation planted outside the Buffer is at least 25 feet in width and depth and, 2) it is contiguous to

existing or planned vegetation within the Buffer, and 3) existing or planned vegetation within the Buffer includes at least 50 linear feet along the shoreline for the entire depth of the Buffer, and 4) the planting plan receives prior City approval.

E. Future Development

Any subsequent redevelopment of a site already assessed an offset fee for either the 10% runoff pollution reduction requirement or the Buffer establishment requirement will require additional Critical Area review if the further redevelopment is determined to be significant development or would result in any change to on-site mitigation required for prior development or use. Such additional redevelopment may require modification of the permit or denial of the permit application. In some cases, further offsets may be required if the redevelopment increases impervious surfaces or displaces vegetation originally approved as part of a Critical Area determination.

F. Cumulative Impact of Development

Certain development projects and uses may be judged to be significant development when a property is developed over time or through obtaining multiple building or use and occupancy permits. In cases where the cumulative impact of the use or development ultimately results in meeting the significant development definition found in Section II. of this CAMP, the project or use shall be subject to Critical Area review.

G. Offsets for Certain Public Uses

The City of Baltimore plans a number of parks, education and cultural facilities within the Critical Area. The City of Baltimore maintains a policy of requiring developers in the Waterfront Revitalization Area to construct and maintain a public pedestrian promenade along the harbor water's edge, typically 20 feet landward of the mean high water line. This easement generally consists of twelve feet of pavement at the water's edge and an eight-foot planting bed. Cultural and educational facilities will also need paved plaza areas to accommodate pedestrian traffic, and due to the size or configuration of the site, reduced areas may be available for planting. In conformance with the spirit of the Critical Area Management Program, developers and the City will be required to mitigate for the water quality impacts of impervious surfaces and provide habitat to the extent appropriate in these areas.

H. Offset Programs

1. Background

The City's Critical Area review process will be triggered in many areas where the 100-foot Buffer requirement and/or the runoff pollution reduction requirement cannot be met on the site. To allow necessary development and redevelopment to proceed while meeting the Critical Area requirements, the City of Baltimore has established two offset programs: 1) a Buffer Offset Program, and 2) a Stormwater Pollution Reduction Offset Program.

Before a developer is permitted to pay offset fees, the City requires the developer to review the many methodologies for reducing environmental impacts. Alternative strategies for water quality and habitat enhancement shall be incorporated into the developer's project to comply with the 2000 Maryland Stormwater Design Manual (Volumes I and II) and the 10% Pollutant Reduction Requirement (10% Rule).

2. Buffer Offset Program

Developers who are unable to comply with the Buffer requirements are required to contribute a fee to the Buffer Offset Fund. The size of the fee will be based on costs associated with installing and maintaining a properly vegetated Buffer equal in area to the amount of Buffer used for development or as otherwise determined according to the requirements presented in Section III. Buffer establishment costs are determined on a square-foot-basis and may be amended periodically by the Board of Estimates. The current Buffer offset fee is \$2.50 per square foot.

Funds collected from developers will be used to install a diverse plant community, including elements of a stratified forest. Alternative offset projects may be considered, provided that the developer is able to satisfy the City that the proposed alternative will result in an environmental benefit to the City's Critical Area equivalent to the installation of the prescribed vegetation on the development site. The City may seek comments and recommendations from the Critical Area Commission.

Because the Buffer offset fees may be substantial when a large proportion of a site is in the Buffer, an alternative is available to provide relief if a property has more than 50% of its site in the Buffer. If the Buffer covers

more than 50% of the site, the total Buffer fee is levied on a maximum of 50% of the area in the Buffer. This alternative may only be used if the following conditions are met:

- a. The project minimizes impacts on the Buffer whenever possible;
- b. The project meets the stormwater pollution reduction standards;
- c. Vegetated parts of the shoreline are protected to the greatest extent possible.

At the discretion of the City of Baltimore Planning staff, which may seek recommendations from the Critical Area Commission, a developer may elect to increase the pollutant reduction requirement to 20% for the entire Buffer on the site as an alternative to the payment of Buffer offset fees.

Buffer fees shall not exceed 2% of the cost of the proposed new development.

3. Receiving Areas for Buffer Offset Projects

The City will designate sites throughout its Critical Area as receiving areas for the Buffer offsets described above. In selecting sites for receiving areas, the City will give priority to lands covered with an impervious surface or having compacted soils. The City will encourage landowners within its Critical Area to allow Buffer offset projects to be installed on private property in exchange for the granting of conservation easements.

Participating landowners, in turn, will be granted a credit toward Buffer offset requirements in the event that future development takes place in portions of the Buffer, which remain unvegetated. The City will explore additional incentives to encourage the use of private lands as receiving areas for Buffer offsets and these additional incentives will be incorporated as future amendments to the City's offset program.

Minimum requirements for qualifications as potential receiving areas include the following

- a. The site is determined by the City as being unlikely to be redeveloped for a water-dependent use, and

- b. The planting plan includes at least 50 linear feet along the shoreline for the entire width of the Buffer. Planting may extend outside the Buffer provided it is contiguous to the vegetated portion of the Buffer and is no less than 25 feet in width and depth.

If suitable private land is not available, City-owned land within the Resource Conservation Area may be used for this purpose. The focus in these areas will be to enhance existing vegetation and habitat.

4. Stormwater Offset Program

Developers who are unable to comply with the runoff pollution reduction requirements as described in Section III will be required to contribute a fee to the Stormwater Offset Fund before building or use and occupancy permits will be issued for the property.

- a. Qualifying for an Offset

A developer may qualify for an offset where the Director of Planning determines that it is infeasible for the developer to meet all or part of the 10% pollution reduction requirement on the development site.

- b. Assessing the Fee for an Offset

The amount of the fee is based on the costs that a developer would incur for installation and maintenance of a stormwater pollution reduction facility on-site. Methodologies for computing existing and proposed pollutant loading and the effectiveness of stormwater management facilities in fulfilling the pollution removal goals are specified in the Stormwater Management Design Manual. The formula for computing the offset fee can be obtained from the Department of Planning.

5. Examples of Offset Fee Projects

Since the adoption of the City's Critical Area Management Program in 1988, the City has collected fees for stormwater offsets and Buffer impacts and used these fees on the following projects:

BUFFER OFFSET FEE PROJECTS

- a. Buffer Restoration - Approximately one thousand (1,000) feet of shoreline re-vegetated in the Middle Branch of the Patapsco River at Kloman Street.
- b. Land Acquisition - Acquired .74 acres on Maisel Street in the floodplain adjacent to the Gwynn's Falls; the land was a used-car dealership. The CA property is now dedicated open space.

STORMWATER OFFSET FEE PROJECTS

- a. Promenade Signage - Two interpretive signs placed at the Inner Harbor promenade illustrating the Critical Area program and explaining sources of stormwater pollution.
- b. Trash Interceptor Study for Fairfield - Study of trash/sediment/pollutants flowing into the Middle Branch of the Patapsco River and recommendations for structures to reduce such pollution.

6. Proposed Offset Fee Projects

- a. Wetlands creation/restoration in the Upper Middle Branch.
- b. Herring Run extended detention system project – stormwater detention system to improve water quality in the Herring Run and subsequently in the Bay.
- c. Habitat Plantings - The Gwynn's Falls parcel will be consolidated with an existing three-acre parcel and all of it will be planted with native vegetation. The three acres were purchased with floodplain acquisition money in the 1970's. Structures were removed, but the area has never been planted.

I. Development in the Critical Area Resulting from State and Local Agency Programs (COMAR 27.02.01)

- 1. State and Local Agency Actions Resulting in Development of Local Significance on Private Lands or Lands Owned by the City of Baltimore:

Critical Area review of all such projects as meet the definition of “local significance” in COMAR 27.02.02.01 shall be as established in COMAR 27.02.02

2. General Approval of State and Local Agency Program Which Result in Development of Local Significance on Private Lands or Lands Owned by the City of Baltimore:

Critical Area review of all such projects that meet the definition of “local significance” in COMAR 27.02.02.01 shall be as established in COMAR 27.02.03

3. State and Local Agency Actions Resulting in Major Development on Private Lands or Lands Owned by the City of Baltimore:

Critical Area review of all such projects as meet the definition of “Major Development” in COMAR 27.02.04.01 shall be as established in COMAR 27.02.04

J. Planting Guide & Forest Mitigation for the Critical Area

1. Goal

To improve the plant life within the Critical Area so as to (1) provide wildlife habitat, (2) protect water quality and (3) make a more attractive urban environment for the citizens of Baltimore.

2. Objectives

To reach the goal, this guide has been created to:

- Help developers understand the landscaping and planting specifications and requirements when developing or redeveloping sites in the Critical Area.
- Provide Coastal Plain plant lists that focus on commercially available species and sizes to assure survivability with minimal maintenance.
- Provide plant lists that includes rapid cover as well as slower growing species.

3. Planting Approach

The exact configuration of Buffer and Critical Area planting will ultimately depend on the constraints and opportunities found on site. Buffer plantings will be located within 100 feet landward from mean high water. Other configurations will be considered providing a significant portion is adjacent to water or that it is contiguous to an existing riparian forest. The minimum width of vegetation adjacent to the water shall be 50 feet.

The size and spacing of plants will also vary with the type of plant and its intended function in the planting approach.

4. Afforestation Requirements

Requirements for Sites without Vegetation-Afforestation Requirements

Many development and redevelopment sites in the City of Baltimore have no vegetation. When a project is planned for such sites, there are requirements for landscaping and/or planting the site to meet the goals mentioned above.

The City uses as guides for afforestation the requirements in the State of Maryland Critical Area Commission Forest Mitigation Paper, the Critical Area law and the standards in the Baltimore City Code-Forest and Tree Conservation statute.

In addition to the mitigation requirements for clearing, the Criteria specify that “if no forest is established on proposed development sites, these sites shall be planted to provide a forest or developed woodland cover of at least 15 percent” (COMAR 27.01.02.04).

Basically, the afforestation requirement results in a traditional landscaping plan for ultra urban City sites, i.e. street trees, tree islands in parking lots and other traditional landscaping practices. Contact the Department of Planning Critical Area planner to determine the number of plants required for a site.

5. Mitigation Requirements for Clearing Forest

In general, sites with existing trees or woody plants having one or several self-supporting stems or trunks and numerous branches may not be cut, removed or destroyed unless approved in advance by the Director of Planning. Any such tree or woody plant cut, removed or destroyed must be replaced and maintained by the property owner. Replacement of all such trees or woody plants must be done in the following manner:

Table 1

MITIGATION FOR CLEARING FOREST/VEGETATION

Development Area Type	Out of Buffer	Out of Buffer Violation	Buffer	Buffer Violation
Intensely Developed Areas (IDA)	1:1	2:1	3:1	3:1
Designated Habitat Protection Areas	3:1	3:1	3:1	3:1
Resource Conservation Area (RCA)	3:1	3:1	3:1	3:1

6. Methods for Understanding Replacement Requirements-Caliper Calculations and Forest Stand Delineation

For Small Sites (under 20,000 square feet) or Ultra Urban Sites with Street Trees Only

The Department of Planning will make the final determination on how the mitigation should be estimated. This will involve either 1) calculating the square footage of the vegetation removed or 2) counting/estimating the total number of caliper inches of trees or woody plants removed.

For Sites Over 20,000 Square Feet

For sites with over 20,000 square feet and if heavily vegetated, a Forest Stand Delineation (FSD) will be required as described in the State Forest Conservation Manual and the Baltimore City Supplement to the State Forest Conservation Manual. The forms for performing the FSD along with forms for performing the in-depth Habitat Assessment (for sites in the Resource Conservation Area and for Designated Habitat Protection Areas), are available from the Department of Planning.

Listed below is a guide used when forest or vegetation with trees and woody plants is removed as part of the development process. Depending on the site, applicants may use Table 2 or the “simplified” version in Table 3.

TABLE 2

**Forest Mitigation Specifications for Baltimore
City Critical Area Program**

**(For Replanting Forest Cleared in Intensely Developed Areas (IDA)
(Do Not Use for Buffer Clearing)**

Credit	Plant type	Size	Spacing	Method
16 square feet	Shrubs	1 gallon	4' on center	Container
64-100 square feet	Pine Trees	4-5'	8-10' on center	Balled and Burlapped
225-625 square feet	Deciduous Trees	1" to 2-1/2" caliper	15' -25' on center	Balled and Burlapped
1 acre	Grass and Woody Shrub Seed Mix	85 pounds	----	See Table 2

TABLE 3

SIMPLIFIED

Forest Mitigation Specifications for Baltimore

City Critical Area Program

(For Replanting Forest Cleared Out of the Buffer in Intensely Developed Areas (IDA)

(Do Not Use for Buffer Clearing)

Credit	Plant type	Size	Spacing	Method	NUMBER
500 square feet	Shrubs	1 gallon	4' on center	Container	31
“	Pine Trees	5'	10' on center	Balled and Burlapped	5
“	Deciduous Trees	2-1/2-" caliper	25' on center	Balled and Burlapped	.8
	Grass and Woody Shrub Seed Mix	-	Spread over 500 square feet	See Table 2	1 pound

Grass and Woody Shrub Seed Mix:

The Maryland State Highway Administration has been successfully using the grass/shrub seed mix below to stabilize roadside areas. Please also see their WEB page below for additional species and wildflower seed mix specifications.

TABLE 4**Woody Shrub And Grass Seed Mix**

<u>Grasses</u>	<u>Lb/acre (kg/1000 m2)</u>
Chewings fescue	10 (1.12)
Canada bluegrass	10 (1.12)
Redtop	5 (0.56)
Interstate lespedeza (inoculant required)	<u>10 (1.12)</u>
Total	35 (3.92)
 <u>Shrubs</u>	 <u>Lb/acre (kg/1000 m2)</u>
Amur honeysuckle or tatarian honeysuckle	12 (1.35)
Bristly locust robinia fertilis or rohispidia (inoculant required)	10 (1.12)
 Shrub lespedeza (inoculant required)	 13 (1.46)
Arrowwood viburnum	<u>15 (1.68)</u>
 Total	 50 (5.61)
 GRAND TOTAL	 85 lbs per acre (95.37)

For any seed mix in the Critical Area, the criteria used for species selection will be:

- High germination rate
- High wildlife value
- Predominately native or naturalized species of the Coastal Plain
- Commercial availability
- Ability to survive in dry, hot conditions and poor soils

Field observations will be performed to observe establishment success rate.

7. Preferred Species

The City of Baltimore has developed a partial list of preferred species for trees and shrub planting (these species do not include shrub seed mix species). The criteria for selection of this list is:

- Predominately Coastal Plain native or naturalized species, or species sometimes occurring in the Coastal Plain
- Ability to perform the desired dynamic function in the community as planted
- Commercial availability
- Anticipated survival and hardiness

Deciduous shrubs

<u>Aronia arbutifolia</u>	(Red Chokeberry)
<u>Cephalanthus occidentalis</u>	(Button Bush)
<u>Clethra alnifolia</u>	(Sweet Pepper Bush)
<u>Cornus amomum</u>	(Silky Dogwood)
<u>Eleagnus umbellata</u>	(Autumn Olive)
<u>Ilex glabra</u>	(Inkberry)
<u>Lindera benzoin</u>	(Common spicebush)
<u>Lonicera tatarica</u>	(Tatarian Honeysuckle)
<u>Myrica pennsylvanica</u>	(Bayberry)
<u>Vaccinium corymbosum</u>	(Highbush Blueberry)
<u>Viburnum dentatum</u>	(Arrowwood)
<u>Rubus allegheniensis</u>	(Blackberry)
<u>Myrica cerifera</u>	(Wax Myrtle)
<u>Iva frutescens</u>	(Marsh Elder)
<u>Baccharis halimifolia</u>	(Groundsel tree)
<u>Ilex verticillata</u>	(Winterberry)
<u>Viburnum prunifolium</u>	(Blackhaw)

Ornamental Shrubs With Wildlife Value

Amelanchier canadensis	(Serviceberry)
Cornus sp.	(Dogwood) preferred species below:
Cornus racemosa	(Gray Dogwood)
Cornus alternifolia	(Alternate-Leaved Dogwood)
Cornus sericea	(Red-Osier Dogwood (naturalized)).
Crataegus sp.	(Hawthorn)

Ilex sp.	(Holly)
Malus sp.	(Crab Apple)
Pyracantha sp.	(Firethorn)
Viburnum sp.	(Viburnum)

These native species, which are also attractive as ornamentals, stabilize soils, and provide food and cover for wildlife, especially birds, in the winter:

<u>Rhus copallina</u>	(Shining Sumac)
<u>Rhus aromatica</u>	(Fragrant Sumac)

Other alternatives are evergreens such as:

<u>Ilex opaca</u>	(American Holly)
<u>Myrica pennsylvanica</u>	(Bayberry)
<u>Myrica cerifera</u>	(Wax Myrtle)

All are commercially available.

Evergreen trees

<u>Ilex opaca</u>	(American Holly)
<u>Pinus strobus</u>	(White Pine)
<u>Pinus thunbergiana</u>	(Japanese Black Pine)

Rapid growing deciduous trees

<u>Acer negundo</u>	(Box Elder)
<u>Acer saccharinum</u>	(Silver Maple)
<u>Fraxinus pennsylvanica</u>	(Green Ash)
<u>Juglans nigra</u>	(Black Walnut)
<u>Plantanus occidentalis</u>	(Sycamore)
<u>Populus alba</u>	(White Poplar)
<u>Populus deltoides</u>	(Cottonwood)
<u>Robinia pseudo-acacia</u>	(Black Locust)
<u>Salix alba</u>	(White Willow)
<u>Fraxinus americana</u>	(White Ash)
<u>Taxodium distichum</u>	(Bald Cypress)

Slower growing deciduous trees

<u>Acer rubrum</u>	(Red Maple)
<u>Betula nigra</u>	(River Birch)
<u>Liquidambar styraciflua</u>	(Sweet Gum)
<u>Magnolia virginiana</u>	(Sweet Bay Magnolia)
<u>Nyssa sylvatica</u>	(Black Gum)
<u>Quercus palustris</u>	(Pin Oak)
<u>Diospyrus virginiana</u>	(Common Persimmon)
<u>Quercus phellos</u>	(Willow Oak)
<u>Quercus rubra</u>	(Red Oak)

8. Planting Approach for On-Site Plantings by Developers:

Developers who chose to satisfy all or part of their Buffer and Critical Area requirements by planting vegetation on their property or another approved receiving area must comply with minimal plant size, species mixes and densities. Designers may elect to use one of the following three approaches for minimal requirements, or submit an alternative approach for approval by the Department of Planning:

- (1) Landscape allowed to progress through natural succession, meaning to allow grasses, tree seedlings and shrubs to "go wild", supplemented with new trees.
- (2) Traditionally managed landscape.
- (3) A combination of (1) and (2) above.

9. Landscape Progressing Through Natural Succession:

Installation of a shrub layer will not be required where developers allow natural succession to occur in their Buffer and/or the rest of the Critical Area. Trees will consist of native and naturalized species of the Coastal Plain. An herbaceous layer should be maintained on the site; either the cover already found on site (providing there is no exposed soil) or planted species with recognized wildlife value. If the site is predominately exotic/invasive species, the City's Critical Area Coordinator and the Planning Department will make a determination on removing/grubbing/spraying species (see list below). The site will be planted throughout with a rapid-growth cover crop of deciduous trees and/or pines and larger

species of slower growing deciduous trees. The sizes and spacing are specified below. Note that spacing refers to an average over entire site, but may be greater or smaller between specific plants.

TABLE 5

**Planting Specifications for Developer-Installed
Buffer: Natural Succession Allowed**

Plant Type	Size	Spacing
Rapid-growth deciduous trees	1-1 1/2" caliper	10-12' o.c.
Slower growing deciduous	1-2 1/2" caliper	15' o.c.
Pine trees	4'-5' heights	8'-10' o.c.

Common invasive, exotic plants include:

Trees

<u>Acer platanoides</u>	(Norway Maple)
<u>Acer pseudoplatanus</u>	(Sycamore Maple)
<u>Ailanthus altissima</u>	(Tree of Heaven)
<u>Eleagnus angustifolia</u>	(Russian Olive)
<u>Eleagnus umbellata</u>	(Autumn Olive)
<u>Morus alba</u>	(White Mulberry)
<u>Paulownia tomentosa</u>	(Empress Tree)
<u>Prunus avium</u>	(Sweet Cherry)
<u>Populus alba</u>	(White Cottonwood)

Shrubs

<u>Berberis thunbergii</u>	(Japanese Barberry)
<u>Euonymus alatus</u>	(Winged Euonymus)
<u>Ligustrum obtusifolium</u>	(Privet)

<u>Lonicera spp.</u>	(Bush Honeysuckles)
<u>Rosa multiflora</u>	(Multiflora Rose)

Vines

<u>Ampelopsis brevipedunculata</u>	(Porcelain Berry)
<u>Hedera helix</u>	(English Ivy)
<u>Lonicera japonica</u>	(Japanese Honeysuckle)
<u>Pueria lobata</u>	(Kudzu)
<u>Vinca minor</u>	(Periwinkle)
<u>Wisteria floribunda</u>	(Japanese Wisteria)

Herbaceous plants

<u>Cirsium arvense</u>	(Canada Thistle)
<u>Coronilla varia</u>	(Crown Vetch)
<u>Lythrum salicaria</u>	(Purple Loosestrife)

The above list, provided in part by the U.S. Fish and Wildlife Service in their publication, "Native Plants for Wildlife Habitat"(November 1995), only touches on the myriad of plants that have invaded the State. Working with the Planning Department to remove them and re-plant beneficial plants helps conserve and enhance wildlife habitat around the Bay.

10. Traditionally Managed Landscape:

In the traditionally managed landscape, it is assumed that invading species will be discouraged as well but the ground layer will consist of new shrubs spaced to produce a complete cover over at least 50 percent of the planting area. The remainder of the area must be covered with grasses with wildlife value. In the Buffer, these grasses may be mowed at a maximum frequency of one time per year. Out of the Buffer, mowing should be kept to a minimum. Slow growing deciduous trees must be planted at the specified spacing below. Note that the spacing is an average over the entire site where distances between individual trees may be larger or smaller. Pine trees at a density of 10' o.c. may be substituted for deciduous trees providing that deciduous trees are planted at a density equivalent to 20' o.c. over at least 50% of the planting area. Species may be chosen from any of the lists provided. The Department of Planning must approve species other than those on the list.

TABLE 6

**Planting Specifications for Developer-Installed
Buffer: Traditionally Managed Landscape**

Plant type	Size	Spacing	Minimum area
Shrubs	5 gallon minimum	50% of spread at maturity or to cover 3 years, whichever is smaller. Spacing at approx. 6' o/c.	50% of planting area
Slow-growing deciduous trees	1"- 2-1/2" caliper	10'-25' o.c.	Entire site or substitute pines over 50% of site at 2:1, pine: deciduous
Evergreen trees	4-6' height	10' o.c.	As needed to satisfy deciduous tree density as indicated above (2:1 substitution, pine: pine: deciduous)

Questions:

Please call the City of Baltimore Department of Planning at 410-396-4329 and ask for the Critical Area Coordinator for assistance.

11. Additional sources of information:

2000 Maryland Stormwater Design Manual, Volume II Stormwater Design Appendices, Appendix A: Landscaping Guidance for Stormwater BMP's (Maryland Department of the Environment):

<http://mde.state.md.us>. (Adobe Acrobat Software Required)

Critical Area Commission WEB site:

<http://www.dnr.state.md.us/criticalarea/> -See “Native Trees and Shrubs in Maryland” and “Forest Mitigation Guidance”

City of Baltimore Forest Conservation Program

<http://baltimorecity.gov/government/planning/images/ForestConservation.pdf> (Adobe Acrobat Software Required)

The Maryland State Highway Administration Wildflower Program WEB Page (shows site selection, species, planting poundage rates, weed control techniques prior to planting, etc.):

<http://www.sha.state.md.us/oed/wildflower.htm>

(WEB site information inserted 1/13/03)

Tree Source

In addition, trees for public land and community planting projects may be purchased from the TREEMendous Maryland tree program. (See insert below)

Purchase Trees



Maryland Department of Natural Resources

***"The best time to plant a tree was twenty years ago.
The second best time is now."
Anonymous***

- | | |
|--|--|
| <ul style="list-style-type: none">• Homeowner Associations• County or Municipal Governments• Schools | <ul style="list-style-type: none">• Environmental Groups• Service Organizations |
|--|--|

An [order form is available by selecting this link](#). NOTE: the order form is an Adobe Acrobat file, for the free Acrobat viewer go to Adobe.com. Order forms can also be obtained by contacting the DNR Forest Service at 410-260-8517.

Purchase your trees from a large variety of reasonably priced, [native species](#) for your PUBLIC land and community tree planting projects.

Spring trees are available for pick-up or delivery by about mid-March. Fall trees are available around mid-September.

Be actively involved in enhancing your community open spaces and rights-of-ways, school grounds and neighborhood parks. Help establish forest buffers of trees and shrubs along streams and creeks and rivers to support Stream ReLeaf, and work towards improving and protecting the health of the community and the Chesapeake Bay. If your community, large or small, is actively involved in tree planting and care, contact your [local Department of Natural Resources Forester](#) for information on being recognized as a [Maryland PLANT Community](#).

The trees can be picked up in Baltimore County, or you may arrange for delivery for an additional fee.

"A sound economy demands a healthy environment, and a healthy environment demands the skilled and caring hand of people."
[Maryland Community Forest Council](#)



For more information email tgalloway@dnr.state.md.us, if you are experiencing problems downloading the form [please email customer service](#).

[How to Plant a Tree](#)
[Volunteers](#)
[Return to TREE-MENDOUS MARYLAND](#)
[DNR Home](#)

(Treemendous Maryland (DNR) inserted 10/31/02)

VI. RESOURCE PROTECTION

The Critical Area Act requires local jurisdictions to identify important natural and community resources within the Critical Area and to devise strategies for protecting and enhancing those resources. This Section and Section IV set forth a series of actions, which the City is undertaking to further the goals of the CAMP.

A. Habitat Protection Areas-General Information and Types

The Critical Area Act identifies ten different Habitat Protection Areas (HPAs). These areas, which include the Buffer and the habitats of threatened and endangered species among others, are located throughout the Critical Area. In addition, some of Baltimore's important natural areas have been identified as Designated Habitat Protection Areas (DHPAs). These areas function as an overlay district in the City and special protection requirements apply. These are by no means all of the important habitats effectively intermingled with industrial areas, interstates and neighborhoods in the City, but these DHPA's have been mapped and surveyed and are especially important habitat for seasonal waterfowl and as fish habitat areas. Although the shoreline habitat of the City seems severely degraded, important pockets of natural habitat remain and some disturbed land has "naturalized" after having been left untended for many years. Only 63 acres of tidal marsh remain of the hundreds of acres that existed in colonial times. An additional 20 acres have been created over the last ten years to compensate for necessary filling permitted by the federal and State governments. A limited number of important non-tidal wetlands and waterfowl staging and concentration areas exist within the City's Critical Area. All Bay tributaries are considered anadromous fish propagation waters. All of these areas are to be protected under criteria set forth in COMAR 27.01.09, part of that protection is through the City's designation of Habitat Protection Areas.

The ten types of Habitat Protection Areas addressed in the Critical Area Act are as follows:

- 1) **100-foot Critical Area Buffer**
- 2) Areas containing threatened and endangered species and species in need of conservation
- 3) Colonial water bird nesting sites
- 4) **Historic waterfowl staging and concentration areas**
- 5) Riparian forests
- 6) Forest areas utilized as breeding areas by forest interior dwelling birds, (i.e., forests of 100 acres or more)

- 7) Designated Natural Heritage Areas
- 8) **Anadromous fish propagation waters**
- 9) **Habitats of local significance including non-tidal wetlands**
- 10) Areas which may in the future be identified by State and Federal agencies as important plant or wildlife habitats

The only types of habitat found in the Critical Area of the City of Baltimore are shown in **boldface** type (Nos. 1, 4, 8, & 9).

This Plan designates twelve areas located in the City of Baltimore, as Designated Habitat Protection Areas or DHPAs as shown in Figure 1.

1. Protection Requirements for Habitat Protection Areas (HPAs)

In order to protect these areas, encroachment by development or redevelopment shall be permitted only upon those portions of a Habitat Protection Area where no significant vegetation exists, subject to the following conditions:

a. Habitat Assessment

Where a development project is proposed to encroach upon a Habitat Protection Area, the developer shall perform a habitat assessment of the site to determine the impact of the proposed development on the protected habitat located on or adjacent to the development site. Any such assessment will be subject to field investigations and other verification methods as determined by the Director of Planning. The habitat assessment requirements and field survey form are available from the City of Baltimore Planning Department.

Advisory Note:

The Department of Planning will make a determination based on site conditions as to whether a separate Forest Stand Delineation will be required. When required, consultants should use the State of Maryland Forest Conservation Manual to determine whether a Simplified, Intermediate or Full Forest Stand Delineation is needed.

b. Mitigation Plan

In such cases where the Director of Planning has reviewed the habitat assessment and concurs with its findings and has further determined that the proposed development or use will have a minimal adverse impact on the habitat designated for protection, the developer shall then propose appropriate environmental mitigation as approved in advance by the Director of Planning.

The proposed mitigation plan shall include sufficient elements so as to render the larger HPA substantially unaltered with respect to the habitat designated for protection. In no case may any building, use or occupancy permit be issued, partially or otherwise, in any HPA until or unless the Director of Planning has certified that the mitigation plan proposed by the property owner is consistent with the requirements of the CAMP. Likewise, no use or occupancy permit, whether it is permanent, temporary or partial may be issued for any development or use until or unless the Director of Planning has certified that the mitigation measures proposed in the approved mitigation plan, have been satisfactorily installed, protected and maintained as proposed in the mitigation plan.

In the event that a property owner has been issued a valid building, use or occupancy permit on the basis of an approved mitigation plan, but subsequent to the issuance of such permits the owner fails to install, protect or maintain the approved on-site mitigation specified in the mitigation plan, all such permits shall be subject to immediate suspension or revocation.

2. Tree Replacement Requirement

Within the Critical Area Habitat Protection Areas (the four listed above) and the twelve Designated Habitat Protection Areas, any tree or woody plant defined as having one or several self-supporting stems or trunks and numerous branches and understory, also defined as herbaceous and woody plants growing under a tree canopy or overstory, may not be cut, removed or destroyed unless approved in advance by the Director of Planning. Any such trees or understory cut, removed or destroyed must be replaced and maintained by the property owner. Replacement of all such trees shall be on a 3:1 basis (in or out of the Buffer) where the combined total caliper of

the replacement trees equals the combined total caliper of the trees displaced. Any tree cut, removed or destroyed without prior approval must be replaced and maintained on a 3:1 basis (in or out of the Buffer). Any tree replacement plan or mitigation program must have the prior written approval of the Director of Planning. No occupancy permit shall be issued until the tree replacement or mitigation program has been completed or until an escrow account or non-revocable letter of credit has been established in the name of the Mayor and City Council. Such account shall be for an amount equal to the total estimated cost of the tree replacement or mitigation plan plus 40 percent for contingencies and project management fees in the event that the developer fails to implement the plan.

B. City of Baltimore Critical Area Plant and Wildlife Habitat

The City of Baltimore's Critical Area lies entirely within the Atlantic Coastal Plain and within the Patapsco River watershed. The vegetation units of this province can be used to describe the habitat types found here. These plant communities include salt marshes, non-tidal wetlands, bottomland and upland forests, and various sub-climax stages of the forest communities. Virtually the entire natural habitat of the City of Baltimore's Critical Area has been disturbed within the past century. For the majority of the land area, shoreline habitat has been completely removed and replaced with paved surfaces, bulkheading or managed lawns. Relatively small pockets of vegetated open space comprised of various stages of secondary growth and wetlands still exist and serve to support wildlife species.

Such open spaces within the Critical Area include a dredge material disposal site with high and low marsh habitat and relatively small parcels of various undeveloped upland plant communities.

The following paragraphs summarize the City's survey of its Critical Area to establish the presence or absence of those types of plant and wildlife habitat specified by the State Critical Area Regulations (COMAR 27.01.09).



1. Upper Middle Branch
2. Gwynns Falls
3. Lower Middle Branch
4. Reedbird
5. Masonville
6. Stonehouse Cove
7. Cabin Branch
8. Hawkins Point
9. Quarantine Road
10. Thoms Cove
11. Fort Armistead
12. Colgate Creek

DESIGNATED HABITAT PROTECTION AREAS

↑
North

1. **100-Foot Critical Area Buffer**

The Critical Area Buffer is the area extending 100 feet landward from the mean high water line of tidal waters, the edge of tidal wetlands, and tributary streams. The majority of our shoreline (84%) has been altered with filling, bulkheading, riprap or concrete rubble. The remaining 16% include beaches, vegetated slopes and banks, eroding banks and vegetated tidal wetlands (Regional Planning Council Report, 1982). The majority of the upland portion of the 100-foot Buffer areas has also been developed and very little natural habitat remains. Tributary streams make up the greatest portion of vegetated Buffer in the City's Critical Area.

2. Areas containing threatened and endangered species and species in need of conservation

The Maryland Department of Natural Resources has established that peregrine falcons are nesting on the Legg Mason Building and the Francis Scott Key Bridge. These are the only Listed Species Sites or Other Significant Habitats in the City of Baltimore as defined by the Maryland Department of Natural Resources.

3. Colonial water bird nesting sites

According to the most recent survey (1999) by the Maryland Department of Natural Resources, there are no colonial water bird nesting sites in the City of Baltimore. Chesapeake Bay Foundation staff, however, have documented a black crowned night heron rookery at the mouth of Curtis Creek and Baltimore Department of Park and Recreation staff have documented another rookery of the same species at the northern end of the Middle Branch of the Patapsco River. The State cannot officially designate an area until documented by the Maryland Department of Natural Resources through site surveys. Although there were some reports, preliminary site investigations by the City of Baltimore staff did not reveal the presence of a colonial water bird nesting site within City boundaries on Curtis Creek. It is possible that, if a rookery exists, it may be located in Anne Arundel County.

4. **Historic waterfowl staging and concentration areas**

The Chesapeake Bay is located within the Atlantic Flyway and thus plays an important role in migratory bird patterns (Maryland Department of

State Planning and Smithsonian Institute, 1975, Maryland Department of Natural Resources - Forest, Wildlife and Heritage Service, 1999).

Baltimore Harbor provides some habitat for wintering waterfowl in its tidal wetlands and open water areas. The Patapsco River mainstem from the Hanover Street Bridge eastward to the Dundalk Marine Terminal support concentrations of various wintering waterfowl. Documented areas of special importance to wintering waterfowl include: the west cove adjoining the Masonville dredge disposal site, the upper Middle Branch, and Stonehouse Cove on Curtis Creek. (Maryland Forest Parks and Wildlife Service, 1988; Slowikowski, 1988, Maryland Department of Natural Resources - Forest, Wildlife and Heritage Service, 1999).

5. Riparian forests
6. Forest interior dwelling bird habitat (FID)

The impact of the loss of even small forests (less than 25 acres) impacts all species of birds and wildlife. Although small forests are much less optimal breeding habitat for most forest-interior birds, these forests can be an important migratory stopover. Maximizing forest cover, minimizing forest isolation (i.e. patches of forest) and increasing forest widths can increase habitat in the Critical Area. (Source: Habitat Management Guidelines, Maryland Partners in Flight Management Committee, 1997)

7. Designated Natural Heritage Areas

The Maryland Natural Heritage Program has designated no Natural Heritage Areas in the City of Baltimore

8. **Anadromous fish propagation waters:**

- a. Definition. Anadromous fish propagation waters are those streams that are a tributary to the Chesapeake Bay where the spawning of anadromous species (e.g., rockfish, striped bass, yellow perch, white perch, shad and river herring) occurs or has occurred. Under this definition, the Patapsco River (Upper Middle Branch) and the Lower Gwynn's Falls are classified as anadromous fish propagation waters.
- b. Identification. The City has identified and mapped

anadromous fish propagation waters and nursery areas as defined in this section, and these maps will soon be available in the Department of Planning. The Patapsco River has been documented to be a spawning area for the anadromous species

White Perch, Hickory Shad, American Shad, and Alewife up to the Bloede Dam. The Upper Middle Branch/Lower Gwynns Falls has been documented to be a spawning area for Yellow and White Perch and Blueback Herring (Department of Natural Resources, Fisheries Division-December 2000). Many more species live and migrate through these waters.

- c. General policies. The policies of Baltimore with regard to anadromous fish propagation waters shall be to:
 - (i) Protect the instream and stream bank habitat of anadromous fish propagation waters;
 - (ii) Promote land use policies and practices in the watershed of spawning streams within the Critical Area, which will minimize the adverse impacts of development on the water quality of the streams; and provide for the unobstructed movement of spawning and larval forms of anadromous fish in streams.
- d. Standards. Within anadromous fish propagation watersheds, the following measures are required:
 - (i) The installation or introduction of concrete riprap or other artificial surfaces onto the bottom of natural streams shall be prohibited unless it can be demonstrated that water quality and fisheries habitat can be improved.
 - (ii) Channelization or other physical alterations, which may change the course of circulation of a stream and thereby interfere with the movement of fish, shall be prohibited.
 - (iii) The City shall require each development activity that occurs within a watershed draining to anadromous fish propagation waters to fulfill the following objectives:
 - 1) Minimize development activities or land disturbances within the watershed;

- 2) Maintain, or if practicable, improve water quality in affected streams or other water bodies;
- 3) Minimize to the extent possible the discharge of sediments into affected streams or other water bodies;
- 4) Maintain, or if practicable, increase the natural or native vegetation of the watershed and tree canopy over the streams.

- (iv) The City shall ensure coordination and compliance with complimentary State laws and regulations:
 - 1) Prohibit the construction or placement of dams or other structures that would interfere with or prevent the movement of spawning fish or larval forms in streams or other designated water bodies. If practical, existing structures that block streams or other water bodies shall be removed; and
 - 2) Ensure that the construction, repair or maintenance activities associated with bridges, or other stream crossing, or with utilities and roads, which involve disturbance within the Buffer or which occur instream, as described in COMAR, shall be prohibited between March 1 and June 15 of each year.

9. **Habitats of local significance and non-tidal wetlands**

Habitats of local significance in the City of Baltimore are different in quality from significant habitat areas in less disturbed or non-urbanized environments. Naturalized areas of any reasonable size, especially when located near water, are valuable to the wildlife populations of City of Baltimore and so are protected by this Plan. These herbaceous, scrub-shrub, and woodland communities include native plants and often-exotic volunteer species. Common resident birds, wintering species, migrants and an assortment of urban-tolerant small mammals are supported by these habitats, each of which is considered desirable in our urban context. For these reasons, selected naturalized areas are proposed for designation as Habitat Protection Areas (HPA's).

Woodlots are valuable habitats to a diversity of species as well as providing many benefits to a city, including reducing water and air pollution and moderating temperatures. COMAR 27.01.05 requires protection of "developed woodlands." These areas, whether or not they lie within an HPA, are protected through the CAMP.

The Critical Area Commission does not regulate non-tidal wetlands. A person conducting a regulated activity within the non-tidal wetlands in the

Critical Area shall obtain a permit from the Maryland Department of the Environment (MDE). All permits for construction will be contingent on a developer's receiving all proper MDE approvals. For more information see: Environmental Article Title 5, subtitle 5-901 through 5-901 through 5-911; Annotated Code of Maryland; COMAR 26.23.

a. Requirements

A permit is required for any activity that alters a non-tidal wetland or its 25-foot Buffer. The 25-foot Buffer is expanded to 100 feet for Wetlands of Special State Concern as defined in COMAR 26.23.06. Applicants are required to demonstrate those proposed impacts to non-tidal wetlands are necessary. The application review process first eliminates, and then reduces impacts through avoidance and minimization. An alternative analysis may be required as part of this process. Mitigation is required for all authorized impacts. Wetland mitigation monitoring is required and will extend beyond construction of an approved mitigation project.

b. Application process

Complete a 'Joint Federal/State Application for the Alteration of any Floodplain, Waterway, Tidal or Non-tidal Wetland in Maryland'; obtain from the U.S. Army Corps of Engineers.

The National Wetland Inventory Maps indicate, and our site investigations have confirmed, that the City of Baltimore has fewer than 10 acres of palustrine wetlands within its Critical Area. These wetlands are scattered in isolated pockets and include small stands of both palustrine forested and palustrine emergent wetlands.

10. Areas that may in the future be identified by State and federal agencies as important plant or wildlife habitats.

Since the City's CAMP was originally adopted in January 1988, no State or federal agency has designated such an area within the City's Critical Area. However, if such an area is designated, it will be incorporated into the Program as provided in COMAR 27.01.09.04C(2) C.

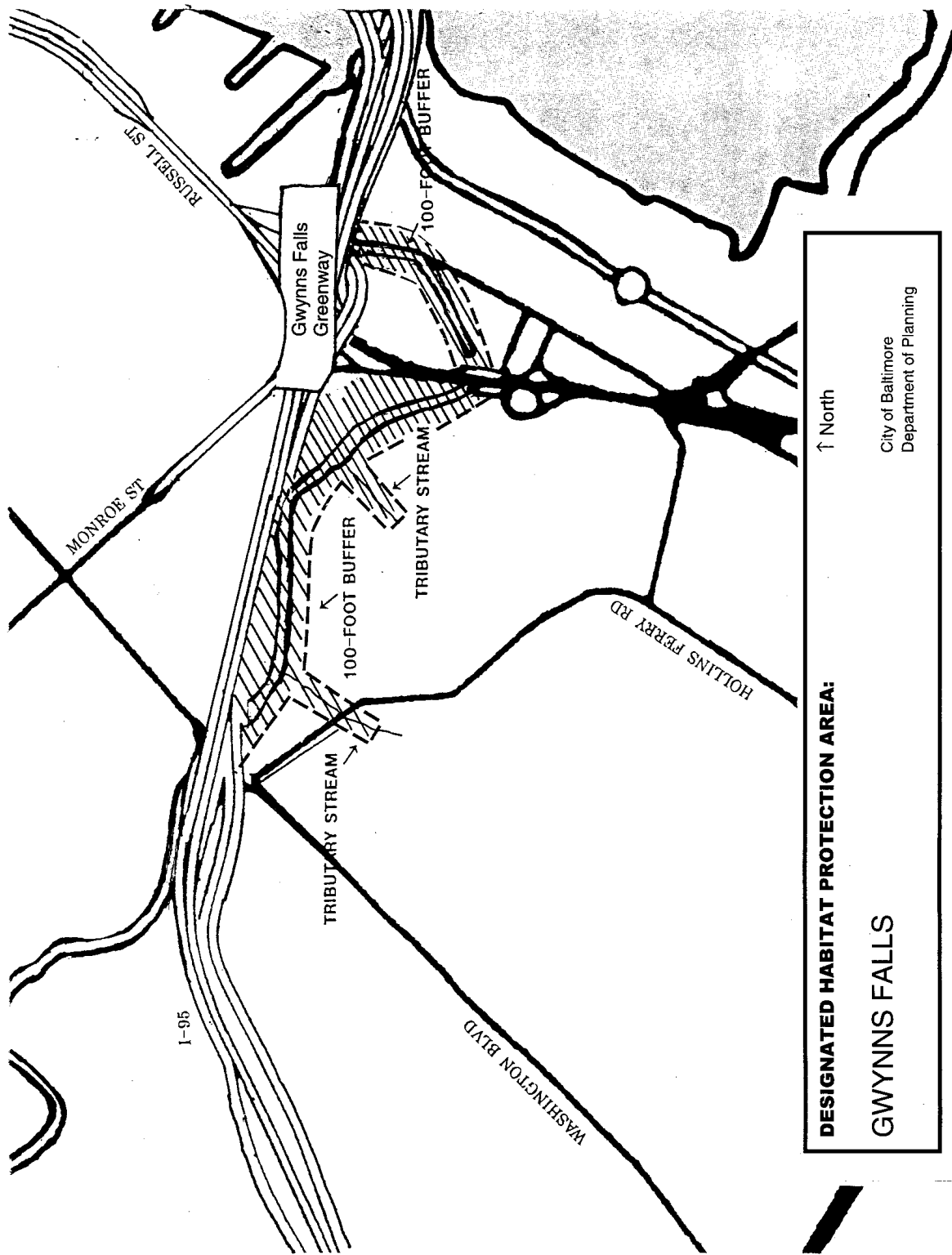
C. Designated Habitat Protection Areas (DHPAs)

1. Upper Middle Branch - This DHPA has been identified as an historic waterfowl staging and concentration area. In addition, portions of this shallow water area have been used as wetland mitigation sites for various waterfront development projects. The Middle Branch area includes all waters to the mean high water line, which lie north of the Western

Maryland Bridge and trestle. In addition, the area includes all uplands within 100 feet of the mean high water line of the waters described above. It also includes the wetland portion of Block #7612, Lot 2 and all lands lying within 25 feet of these wetlands.

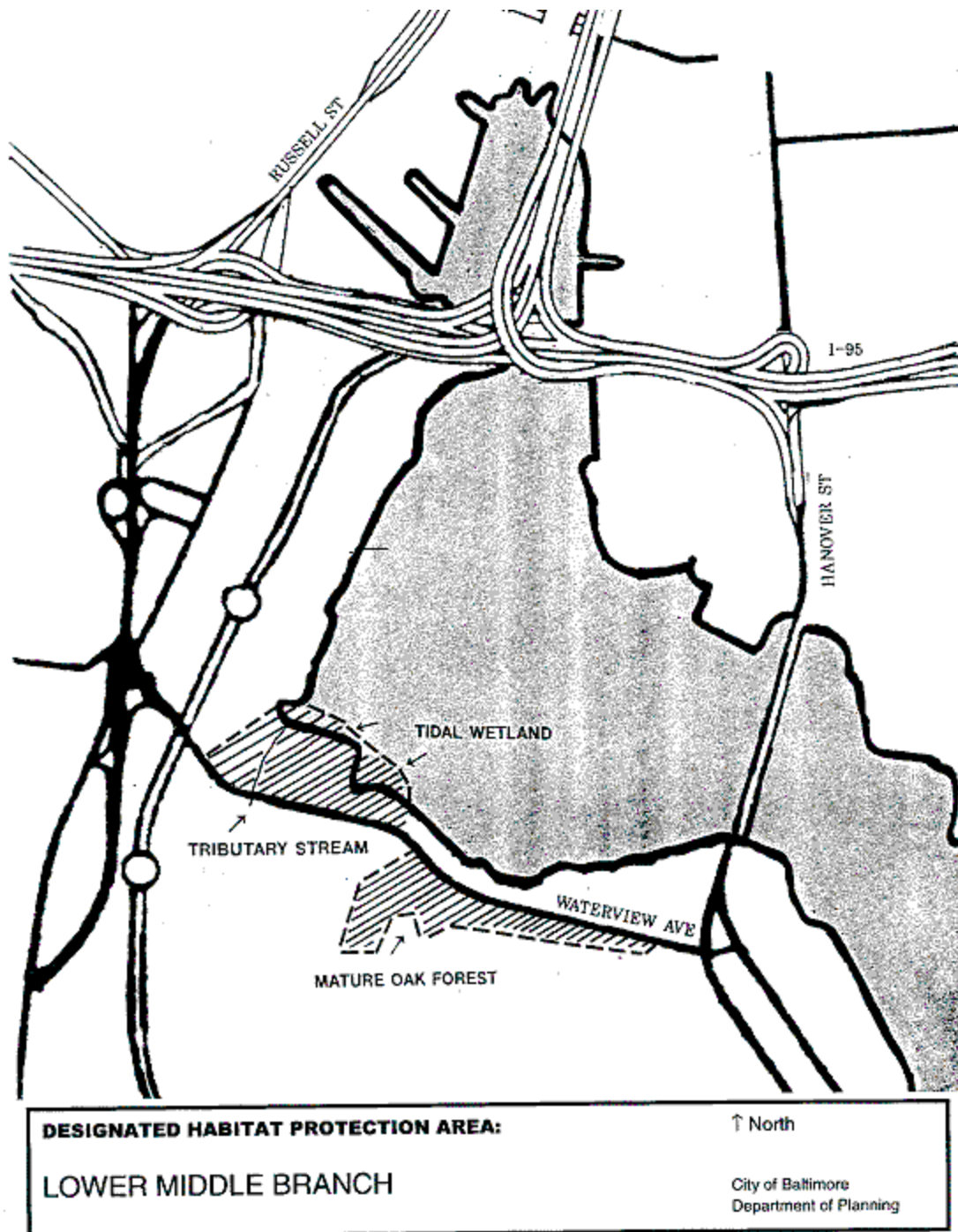
2. Gwynns Falls - This DHPA has been identified as a major greenway, needing protection as a wildlife corridor. This corridor connects the upland forests of the upper Gwynns Falls Watershed with the wetlands and tidal waters of the upper Middle Branch. The area includes the waters of the Gwynns Falls from the upper Middle Branch continuing upstream to a point 1000 feet north and west of the southeast side of the Washington Boulevard Bridge. In addition, the area includes all lands within 100-feet of waters of the Gwynns Falls on the south side of the stream from the upper Middle Branch to the boundary of the Critical Area. On the north side of the stream, the area includes all lands within 100-feet of the waters of the Gwynns Falls extending from the upper Middle Branch to the point of intersection with the Russell Street bridge and then expands to various widths to be bounded on the north by the B & O Railroad right-of-way and continues along the I-95 right-of-way to the point where the I-95 right-of-way intersects Washington Boulevard. From this point, the area includes all lands within 100-feet from the waters of the Gwynns Falls on the north side of the stream continuing upstream to the boundary of the Critical Area. This area also includes the streambeds and all lands lying within 100-feet of the streambeds of the two tributary streams which intersect the Gwynns Falls on its south side. The first is located between Bremen and Berlin Streets and continues from the main stem of the Gwynns Falls southward to the Critical Area boundary and the second is located along the B & O Railroad right-of-way and also continues approximately 580 feet from the main stem of the Gwynns Falls.



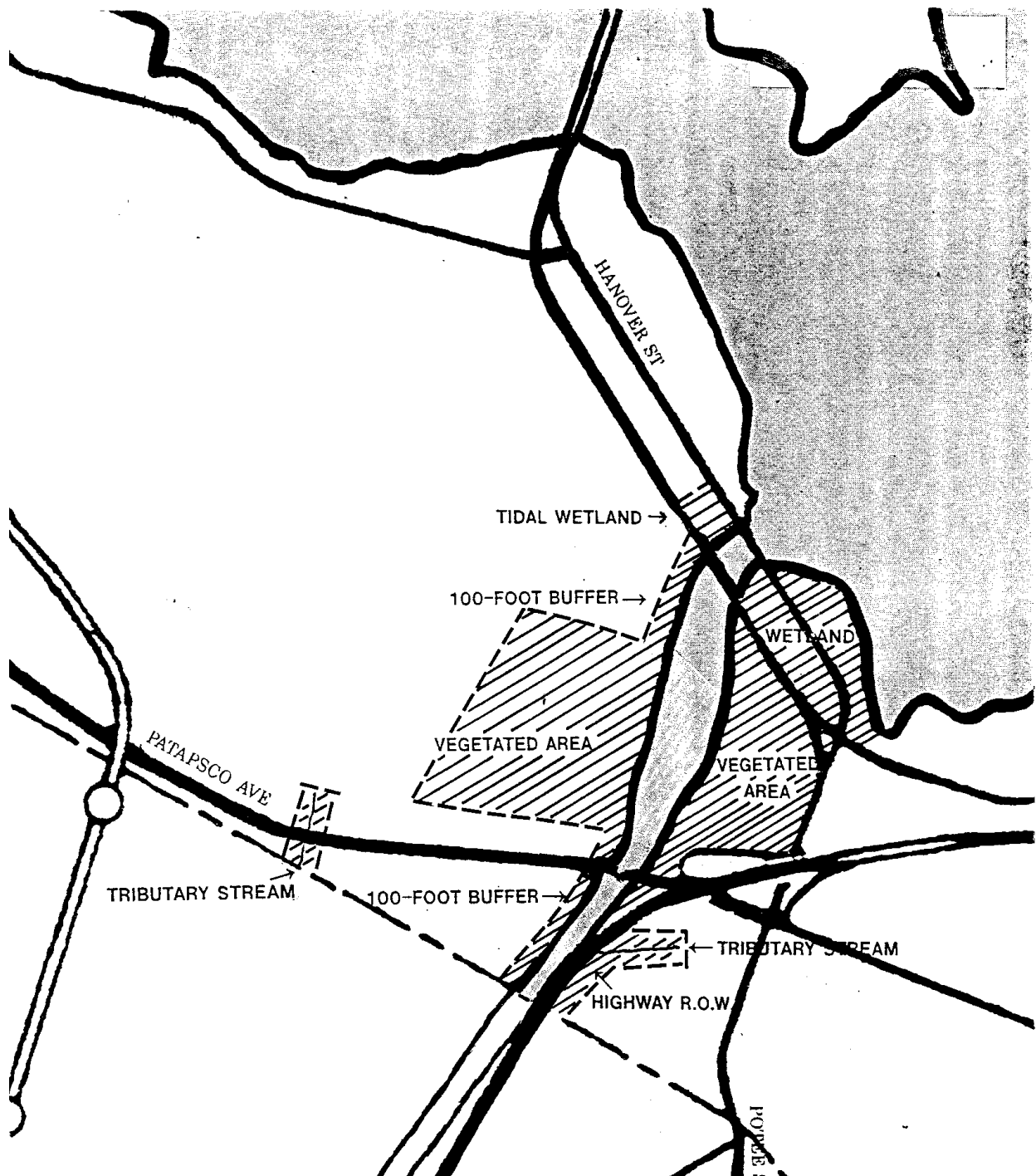


3. Lower Middle Branch - This DHPA includes two discontinuous areas including the following: 1) a tidal wetland and tidal stream on the lower Middle Branch; 2) a mature oak forest on the south side of Waterview Avenue. The first area includes the waters of the tidal stream which runs from Waterview Avenue northward to the lower Middle Branch; all lands within 100 feet of both sides of the stream; a 100-foot Buffer along the shoreline of Block #7611, Lot 1 and the entirety of Lots 2 and 7, and the shallow tidal waters of the lower Middle Branch which border these properties.

The second area includes a mature oak forest on portions of the following properties: Block #7612-E, Lot 10; Block #7610 including lots 4, 5, 7, 8, 9, and the entirety of Lots 18 and 19.



4. Reedbird - This DHPA includes three discontinuous areas including the following: 1) tidal wetlands and City-owned open spaces along both banks of the Patapsco River; 2) a streambed flowing under the 500 block of West Patapsco Avenue; and 3) a streambed west of the intersection of Garrett and Potee Streets. The first area encompasses the following: the waters of the Patapsco river; tidal wetlands, Critical Area Buffer and portions of the publicly-owned vegetated open space in Block #7612-L including Lots 1 and that portion of Lot 2 which lies south of an imaginary line that would be created where Cherryland Road extended at its present alignment through Lot 2 to the Patapsco River; those portions of Block #7612-N, Lots 7, 8, and 10 which lie in the 100 foot Buffer; all lands extending from the south bank of the Patapsco River to the right-of-way of the Baltimore Harbor Tunnel Thruway and continuing from the City line to the point where the Harbor Tunnel Thruway intersects Potee Street; the entirety of Block #7612-M; and that portion of Block #7027, Lot 20 that is bounded by S. Hanover Street, Potee Street, and Frankfurst Avenue. The second area includes 100 feet on either side of a stream flowing towards Baltimore County, located in Block #7612-G, Lots 1 and 4. The third area includes 100 feet on either side of a stream flowing northwesterly towards the Patapsco River starting from a point located 475 feet from the intersection of Potee and Garrett Streets, and 100 feet on either side of a small inlet tributary on the western side of the same stream, both of which are located in Block #7027-C, portions of Lots 3 and 4.

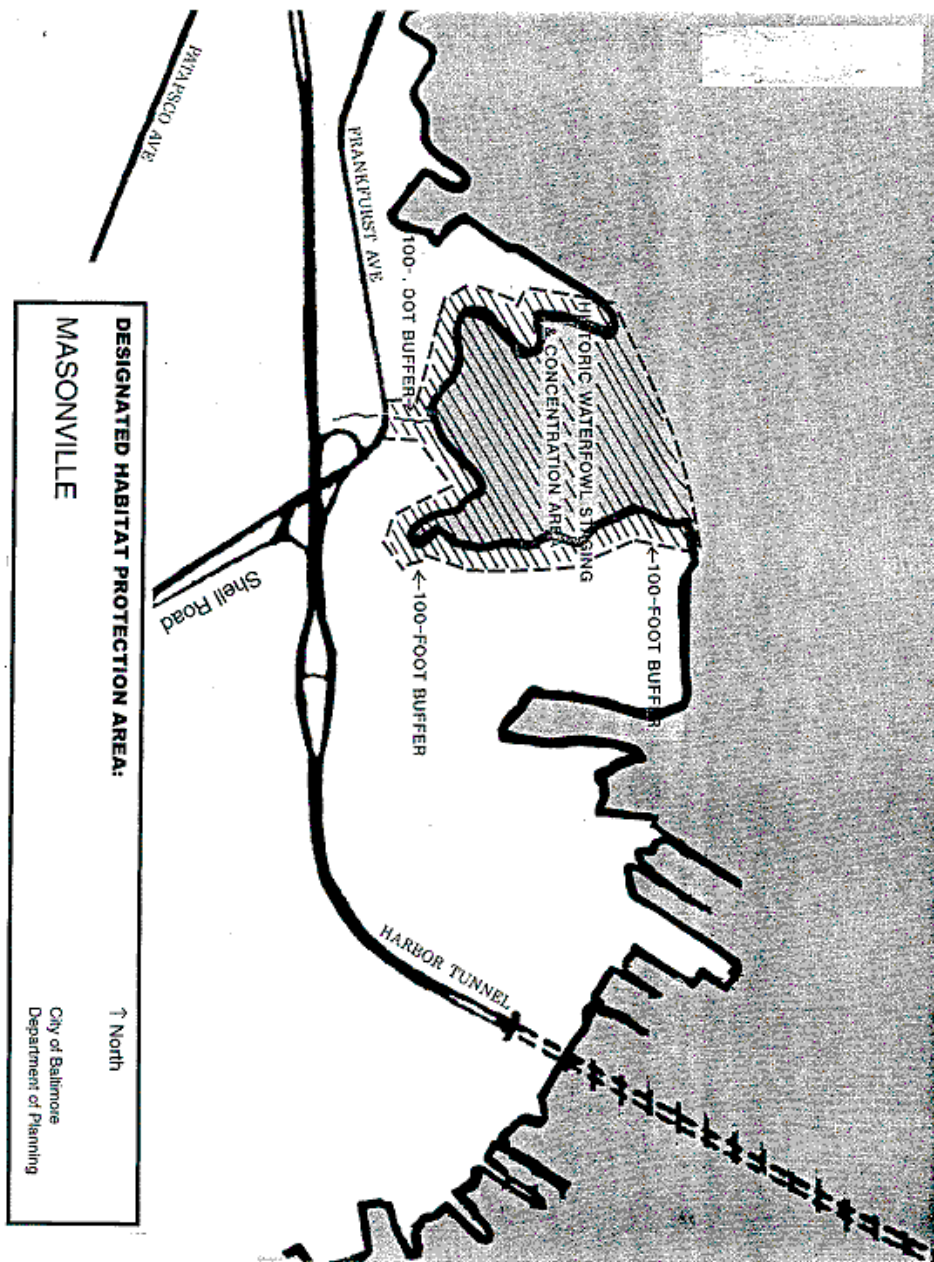


DESIGNATED HABITAT PROTECTION AREA:

REEDBIRD

↑ North

City of Baltimore
Department of Planning



5. Masonville - This DHPA has been identified as a historic waterfowl staging and concentration area with an extensive vegetated Buffer. The area includes all waters to the mean high water line which lie within the cove formed by the irregular shoreline of Block #7043, Lot 1 and all lands within 100 feet of the mean high water line. In addition, the area includes a 100-foot Buffer on both sides of the tributary stream that empties into this cove at the south end of the property. This 100-foot Buffer extends from the Critical Area line northward to the point where it intersects the Critical Area Buffer formed by the tidal waters of the Patapsco River.

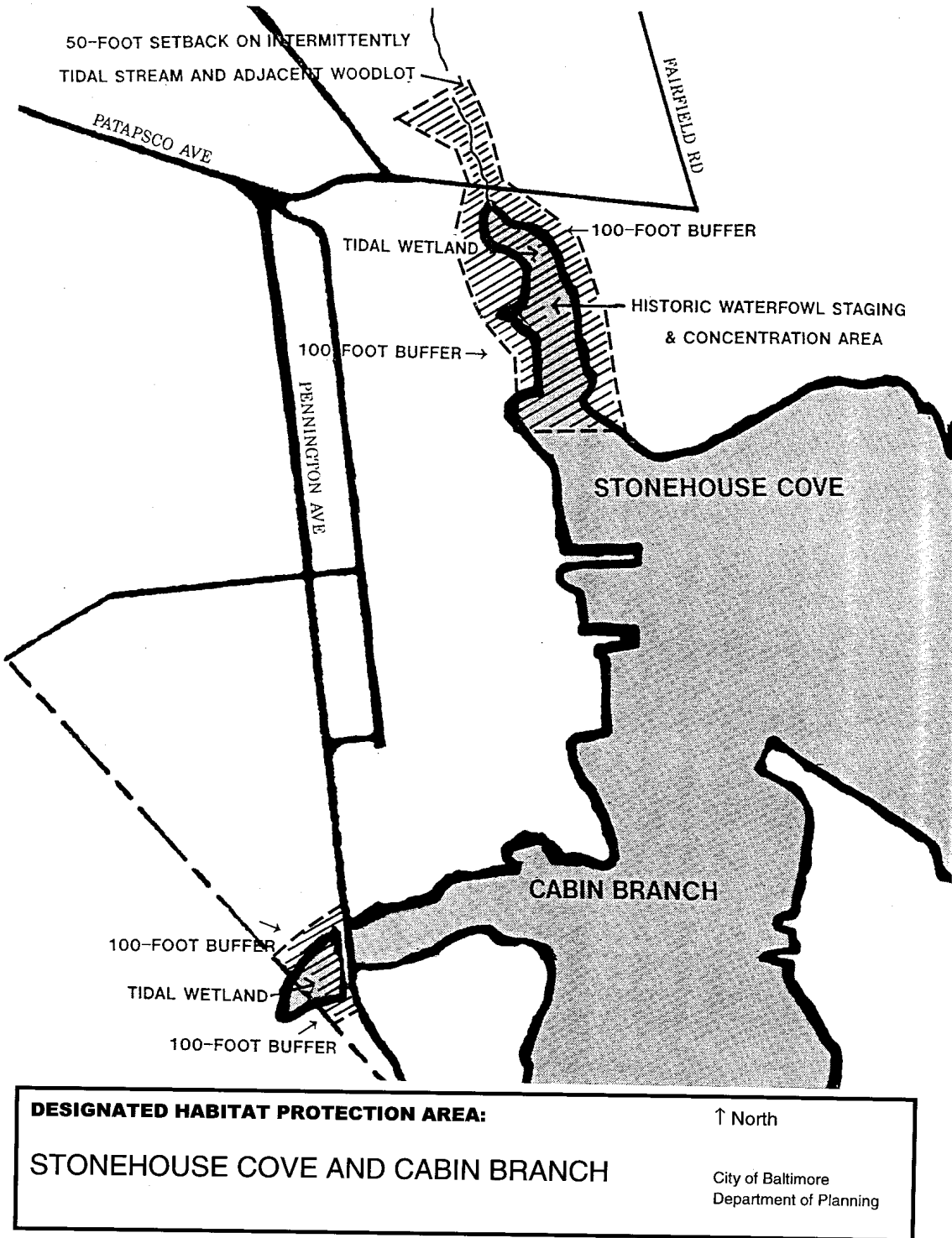
It is important to note that the Maryland Port Administration (MPA) has maintained and operated a dredge disposal site on the upland area immediately east of these waters. In addition, the MPA has for at least a decade now, identified this area for eventual development as a major terminal similar to their Dundalk and Seagirt facilities. Further, it is extremely important to note that the Masonville area is the only area the MPA has within Baltimore Harbor to expand for future cargo growth. Based on rigorous market analysis and discussions with major international companies, the MPA envisions the development of the Masonville site as a dedicated auto facility. Auto and Roll On/Roll Off cargoes are one of the most important in the port from the point of view of economic impact and one of the most labor intensive. Based on preliminary conceptual designs the terminal would encompass about 104 acres and include two, one thousand-foot berths to handle the most modern auto carriers in international commerce. Given the Critical Area Habitat Protection Area designation, the MPA will only be developing about one third of the total site. The rest will remain in natural habitat, as designated herein. Auto business in the port is currently handled at Dundalk Marine Terminal and private terminals adjacent to Masonville. These terminals are currently close to capacity and thus any new business would be significantly constrained unless the plans discussed herein are implemented.

In response to the complex balance that must be achieved between economic development for the benefit of the State and protection of habitat, the Maryland Department of Transportation (MDOT) in cooperation with the Department of Natural Resources (DNR) has developed a comprehensive plan to address future expansion areas for the Port. An important part of this master plan is an environmental element for the improvement in quality and/or quantity of habitat areas in a manner

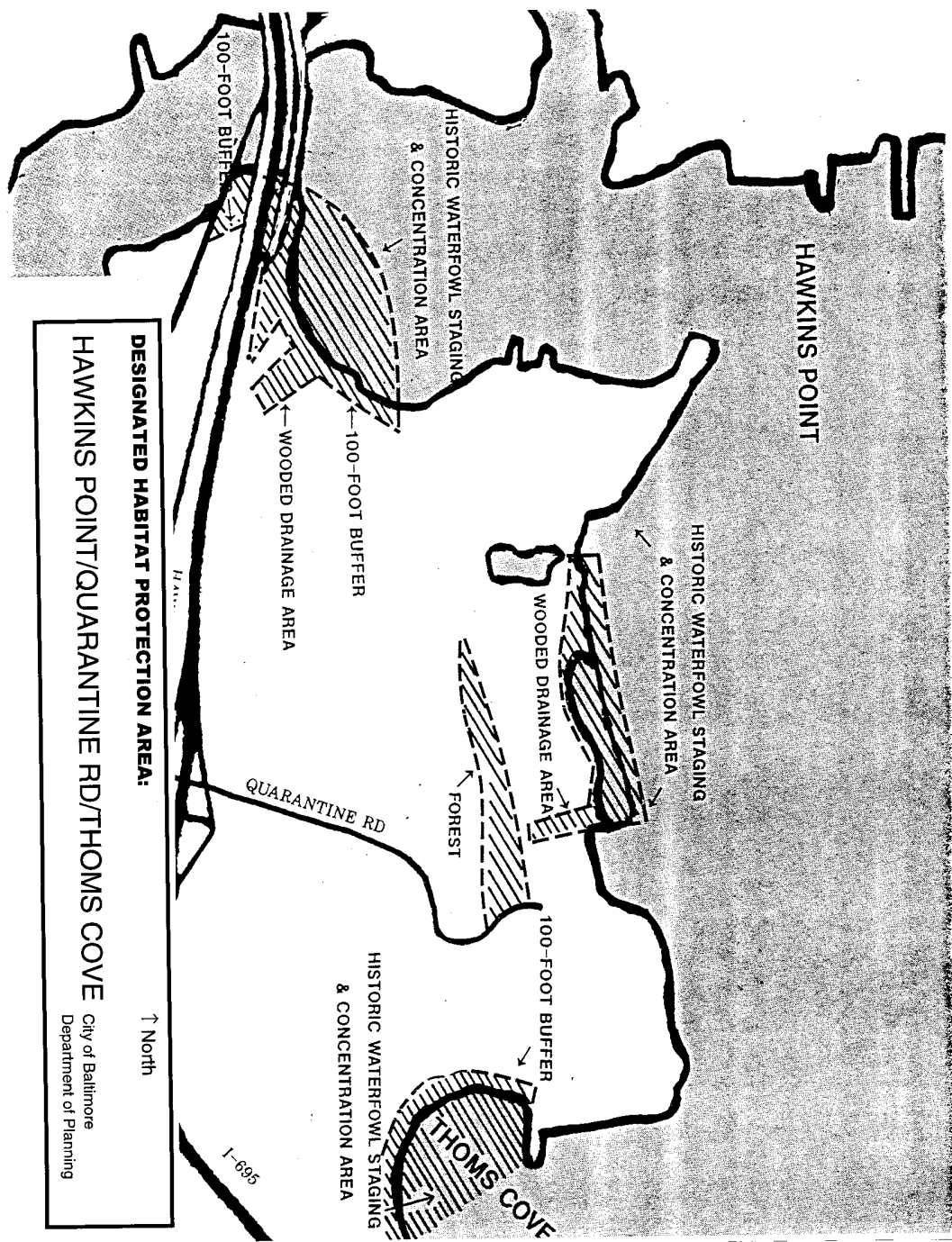
consistent with the policies established in COMAR 27.01.09.04(B). The plan is part of MPA's plans for marine terminal facilities and dredged disposal. In the event that the Critical Area Commission approves a

Maryland Port Administration terminal at this location, suitable mitigation will be undertaken by the Port Administration to offset for the impacts of development in and around this Designated Habitat Protection Area. It should be noted that the approval of the use of the site as a marine terminal lies with the State Critical Area Commission as established in COMAR 27.02.05. The MPA plans to work closely with the City and the Critical Area Commission to assure an appropriate balance between the Port's ability to expand to handle new business for the economic good of the entire Baltimore region, and the need to protect and improve existing environmental resources.

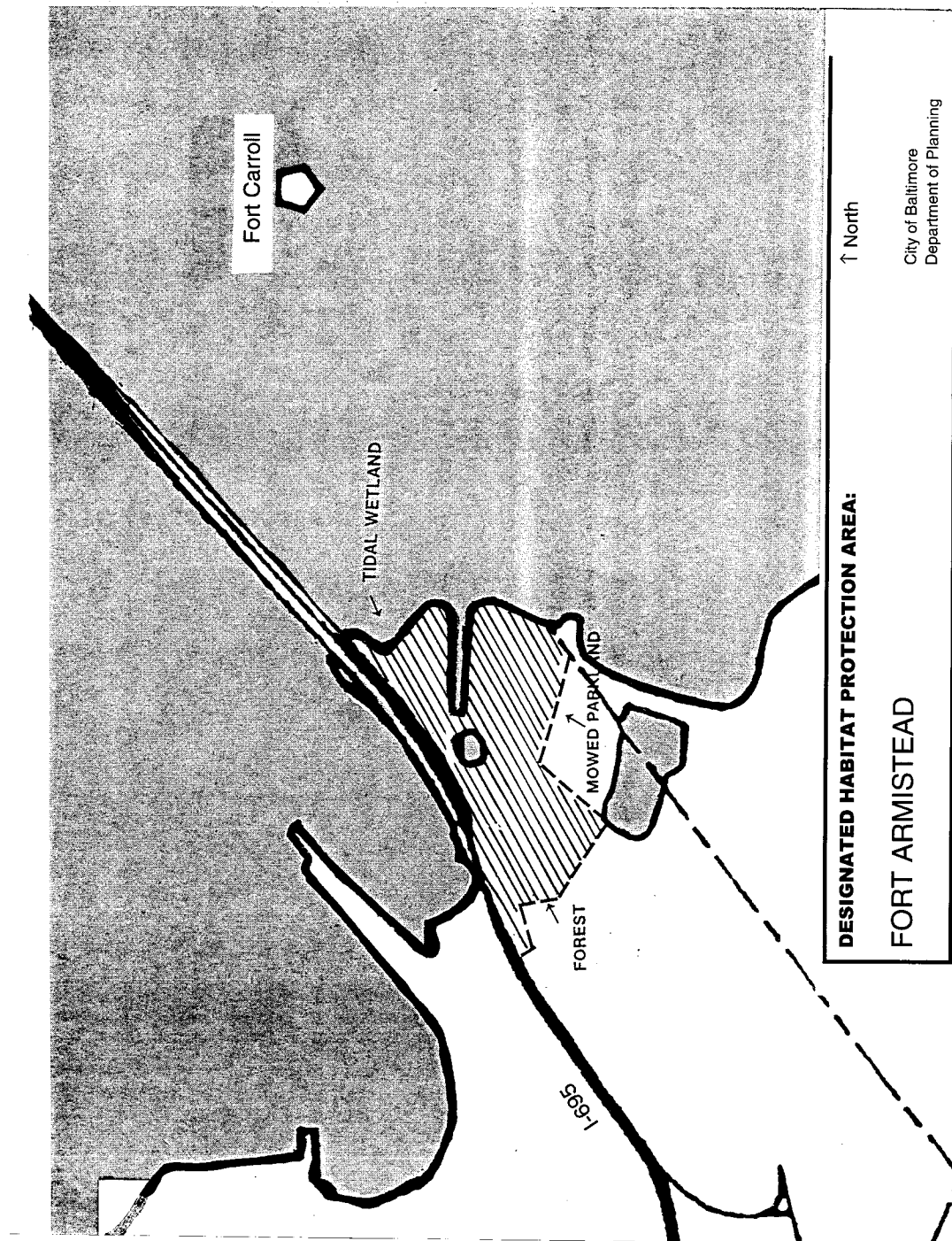
6. Stonehouse Cove - This HPA has been identified as a historic waterfowl staging and concentration area with an extensive vegetated buffer. The cove contains vegetated tidal wetlands bordering on upland-forested areas. The upper reach of the cove contains an intermittent stream, which is heavily vegetated along both banks. The area includes all the waters of the cove extending out into Curtis Creek to a point located approximately 1,750 feet south of the roadbed when measured perpendicularly from East Patapsco Avenue. The area also includes: all lands within 100 feet of the tidal waters described above; all lands within 100 feet of the intermittent tidal stream extending from the north side of the East Patapsco Avenue bridge and continuing upstream to the limits of the Critical Area; and the forested area lying in Block #7335-E, covering portions of Lots 1, 3, and 6. In addition to the above, this habitat protection area includes the forested areas along the western side of the cove extending from East Patapsco Avenue and bounded on the west by the access road to the CSX Transportation coal terminal, further extending southward along the access road to a point located approximately 1,200 feet where the access road intersects the 100-foot Buffer. From this point of intersection, the HPA includes the 100-foot Buffer southward extending to a point along the shoreline situated approximately 1,750 feet from East Patapsco Avenue when measured perpendicularly.



7. Cabin Branch - This HPA contains vegetated tidal wetlands along both its banks extending from the west side of the Pennington Avenue bridge to the City line. The area includes the waters off Block # 7173 including portions of Lots 11A, 12, and 13, and Block # 7173A including portions of Lots 1D and 1E. In addition, all uplands within 100 feet of these waters are included as well.



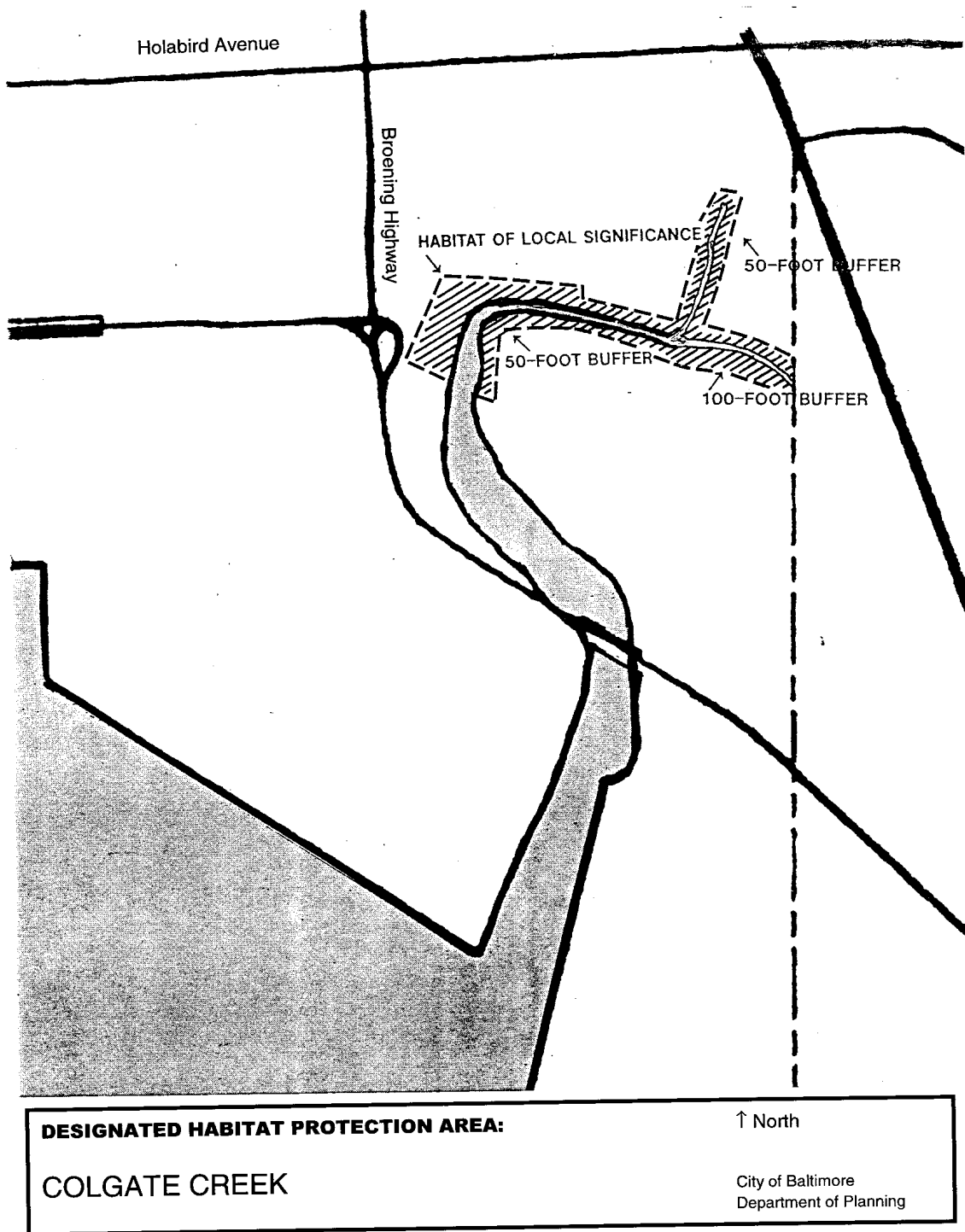
8. Hawkins Point - This area on the Hawkins Point peninsula contains a historic waterfowl staging and concentration area and a densely vegetated Buffer. The DHPA includes the tidal waters off Block #7000, Lots 1, 7, 8, and 9 including I-695 right-of-way. The area also includes a 100-foot Buffer along the shoreline of these properties. In addition, the area includes the protection of woodlands adjoining the drainage areas located on Block #7000, Lots 7, 8, and 9.
9. Quarantine Road - This designated area contains a historic waterfowl staging and concentration area. The DHPA includes the waters off the vegetated portion of the shoreline of Block #7003, Lot 4 and a 100-foot Buffer along this same section of shoreline. The area also includes the wooded drainage area along the eastern side of the property and the forested portions of Block #7005, Lots 30 and 31 and Block #7002, Lot 3 which fall within the Critical Area.



10. Thoms Cove - The third designated area on the Hawkins Point peninsula is Thoms Cove. The cove has been identified as a historic waterfowl staging and concentration area. This DHPA includes the waters off the shoreline of Block #7005 Lot 35 as well as the 100-foot Buffer along the shoreline.

As in the case of the proposed Habitat Protection Area at Masonville, the City recognizes the MPA's long-range plans for a dredged material disposal site in and around Thoms Cove. It is anticipated that the MPA will also provide suitable mitigation at this site if and when it is approved for development.

11. Fort Armistead - This DHPA contains a large tidal wetland that was created as mitigation for the construction of the Francis Scott Key bridge. The designated area includes the Fort Armistead Park (Block #7006, Lot 8) and a portion of the I-695 right-of-way extending northeasterly from the intersection of Dock Road and I-695.



12. Colgate Creek - This DHPA is an important tidal tributary stream, which has a vegetated shoreline along most of its length. The designated area includes the following: Colgate Creek; the entirety of Block 6921, Lot #4; the entirety of Block #6922, Lots #1, #2 and #4, and the portion of Lot #5 which lies within 10 feet of mean high tide. Beginning at the point where Colgate Creek passes under Van Deman Street on its east side, the area includes all lands within 100 feet of mean high tide on the north, east and west sides of the stream as it traverses Block 6923, Lot #1. On the south side of Colgate Creek as it traverses Block 6923, Lot #1, the HPA shall consist of all lands within 100 feet of mean high tide.

D. Protection Requirements for HPAs and DHPAs

1. In order to protect the undeveloped Habitat Protection Areas and Designated Habitat Protection Areas described above, encroachment by development or redevelopment shall be permitted only upon those portions of an HPA or DHPA, which are already developed, subject to the conditions set forth below.

When an encroachment is proposed for any portion of an HPA or DHPA, the Director of Planning shall determine the extent of existing development on the project site. The Director will base determinations regarding the extent of existing development on a review of the following:

- a. Habitat assessment;
- b. Field investigations and other verification methods deemed appropriate and necessary by the Director;
- c. Consultation with experts including the Maryland Department of Natural Resources;

The Director's determination will reasonably reflect the information and recommendations provided by items (a) - (c).

2. Habitat Protection Areas and Designated Habitat Protection Areas that are Not Already Developed.

In those portions of identified HPAs and DHPAs where the Director of Planning for the City of Baltimore determines that the area is not developed, no disturbance or encroachment by development, redevelopment, destruction of vegetation or certain uses will be allowed.

Provisions for appeals of determinations and requests for variances are presented in Section VII of this document.

3. Habitat Protection Areas That Are Developed

In those portions of identified HPAs and DHPAs where the Director of Planning determines that an area is developed, the developer may encroach upon the HPA or DHPA, subject to the conditions set forth below.

The developer shall demonstrate that the proposed development could not be located elsewhere on the property and that the disturbance to the area is limited to the absolute minimum required for the development, as determined by the Director of Planning.

The Director of Planning shall certify that the above conditions have been met and that the proposed development will not adversely affect the HPA or DHPA. The developer shall prepare a habitat assessment and a mitigation plan for the development site as described below.

In determining whether the proposed development will adversely affect the HPA or DHPA, the Director shall, where appropriate, seek review and/or technical expertise from the Maryland Department of Natural Resources

4. Habitat Assessment

Where a development project is proposed to encroach upon a HPA or DHPA, the developer shall perform a habitat assessment of the site to determine the impact of the proposed development on the protected habitat located on or adjacent to the development site. Any such assessment will be subject to field investigations and other verification methods deemed appropriate and necessary by the Director of Planning. The habitat assessment requirements and field survey form are found in the Planning Department offices.

5. Mitigation Plan

In such cases where the Director of Planning has reviewed the habitat assessment and concurs with its findings and has further determined that

the proposed development or use will have a minimal adverse impact on the habitat designated for protection, the developer shall then propose appropriate environmental mitigation. The proposed mitigation plan shall include sufficient elements so as to render the larger HPA or DHPA substantially unaltered with respect to the habitat designated for protection as required in COMAR 27.01.09.04C (2)(b)(ii) and 27.01.09.05. In no

case may any building, use or occupancy permit be issued, partially or otherwise, in any HPA or DHPA until or unless the Director of Planning has certified that the mitigation plan proposed by the property owner is consistent with the requirements of the CAMP. Likewise, no use or occupancy permit, whether it is permanent, temporary or partial may be issued for any development or use until or unless the Director of Planning has certified that the mitigation measures proposed in the approved mitigation plan, have been satisfactorily installed, protected and maintained.

In the event that a property owner has been issued a valid building, use or occupancy permit on the basis of an approved mitigation plan, but subsequent to the issuance of such permits the owner fails to install, protect or maintain the approved on-site mitigation specified in the mitigation plan, all such permits shall be subject to immediate suspension or revocation.

VII. WATER QUALITY IMPROVEMENT

A. Findings:

For over 200 years, heavy development throughout the Baltimore metropolitan area has degraded the quality of tidal water of the Baltimore Harbor. Clearing of the land during Colonial times produced rapid sedimentation while later industrialization further polluted the waters. Inadequate sewage treatment, until recently, has been a serious problem, having an impact on both public health and aquatic life. Efforts in the last 15 years to regulate construction practices and industrial discharges, improve sewage treatment plants and construct new sewage lines have made noticeable changes in the water quality and aquatic life of the Harbor. Dissolved oxygen is increasing and human sewage waste (fecal coliform) levels have been reduced. Even so, too many nutrients, poor water circulation and flushing lead to a continued lack of oxygen in the Harbor and the Middle Branch, especially in the summer months. Additional industrial discharges, sewage pipe leaks and overflows, and oil and grit on hard surfaces (parking lots, etc.) carried by stormwater runoff contribute to the problem. In addition, the sediments on the bottom of the Harbor have been estimated to contribute 60% or more of the nitrogen and phosphorus in the Harbor water.

B. Goals

The goal for water quality improvement in Baltimore Harbor is to realize the potential of the Harbor as an environment for people, industry and aquatic life. The water quality goals for the harbor encompass the following objectives:

- 1) To support existing human uses and those planned for the future, and
- 2) To provide conditions for a healthy, balanced ecosystem in so far as is possible within a working port estuary.

The Harbor's uses include shipping, industry, non-water-contact recreation, fishing, crabbing and habitat for aquatic life. Water quality criteria are determined by the human uses and aquatic life requirements; shipping and industry impose negative impacts on the recreational uses and aquatic life. Water quality in the Harbor is in a degraded condition. Improvements have been made since the early 1970s resulting in a reduction in nutrients, toxins, debris, litter, an increase in dissolved oxygen, and lower fecal coliform counts. However, biological studies have shown that there is a diverse aquatic population that would benefit from more water quality and habitat improvements. Bottom-dwelling species show signs of extreme degradation although some improvement in habitat

has been observed. Dissolved oxygen, bacteria, and heavy metals are the greatest focus of concern for water quality in the Harbor.

The understanding of cause and effect relationships between pollution impacts and environmental degradation of the Harbor is incomplete. Without this knowledge, it is impossible to develop a cost-effective remediation plan. The City has taken measures to identify the relative sources of non-point source pollution as required under the Federal Clean Water Act Amendments of 1987. The amendments required all municipalities with populations over 100,000 to submit a two-phased National Pollutant Discharge Elimination System (NPDES) permit application. The applications are quite voluminous including plans to address cause and affect relationships between pollutant and water quality use impairment. The City completed its application and submitted it to the Maryland Department of the Environment (MDE), the delegated authority, on November 16, 1992. Once the application was approved (within one year of submission), the permit application provided the framework for a comprehensive water quality plan for the City.

For more information, contact the City's Water Quality Management office at 410-396-0732. Improvements to local sediment control and stormwater management regulations are required under the NPDES program.

VIII. WATER-DEPENDENT FACILITIES AND WATERFRONT INDUSTRY PLAN

A. Findings:

Baltimore's position as a major port on the east coast and its fully developed shoreline make virtually any site appropriate for water-dependent redevelopment. In addition, much of the City's industrial land lies within the Critical Area, due to its historical role as a port. To seek new jobs and secure a competitive position in the market place, the City must encourage maximum redevelopment of industrial land throughout the City. Thus, it would place an unreasonable burden on the City to reserve all of its industrial land within the Critical Area for water-dependent industrial redevelopment.

B. Goals:

The City will continue to encourage industrial redevelopment in a manner consistent with the intent of the Critical Area legislation. While the City will encourage the redevelopment of port-related facilities within its Critical Area, it cannot reserve designated portions of its Critical Area exclusively for this purpose. The City will continue to control the development of marinas through its Zoning Ordinance and Marina Master Plan.

In accordance with COMAR 27.01.03.03-(a)(4), insofar as possible, non-water-dependent structures or operations associated with water-dependent projects or activities are located outside the Buffer.

In addition, in accordance with COMAR 27.01.03.04, any proposals for new or expanded new water-dependent facilities shall consider the proposal relative to the following factors:

- a. That the activities will not significantly alter existing water circulation patterns or salinity regimes;
- b. That the water body upon which these activities are proposed has adequate flushing characteristics in the area;
- c. That disturbance to wetlands, submerged aquatic plant beds, or other areas of important aquatic habitats will be minimized;
- d. That adverse impacts to water quality that may occur as a result of

these activities, such as non-point source runoff, sewage discharge from land activities or vessels, or from boat cleaning and maintenance operations, is minimized;

- e. That shellfish beds will not be disturbed or be made subject to discharge that will render them unsuitable for harvesting;
- f. That dredging shall be conducted in a manner, and using a method, which causes the least disturbance to water quality and aquatic and terrestrial habitats in the area immediately surrounding the dredging operation or within the Critical Area generally;
- g. That dredge spoil will not be placed within the Buffer or elsewhere in that portion of the Critical Area which has been designated as a Habitat Protection Area except as necessary for:
 - (i) Backfill for permitted shore erosion protection measures;
 - (ii) Use in approved vegetative shore erosion projects;
 - (III) Placement on previously approved channel maintenance spoil disposal areas and;
 - (iv) Interference with the natural transport of sand will be minimized.

The information necessary for evaluating the above factors, if not available locally, should be obtained from appropriate state and federal agencies.

IX. IMPLEMENTATION

A. Local Adoption of the CAMP

The City's CAMP was originally enacted into law by City Council Resolution No. 107 and companion Ordinances Nos. 1130, 1131, and 1132, effective January 4, 1988. Therefore, as of that date, all development activity, which requires any public action, listed in Section III. A and which constitutes significant development as defined herein is subject to any and all applicable CAMP requirements specified in the City Code and this CAMP document. Subsequent to its adoption, the City's CAMP was amended by Ordinance No. 356, effective June 22, 1994, and approved by the Chesapeake Bay Critical Area Commission (CBCAC) on November 2, 1994. This CAMP document was further modified by Ordinance No. 517, effective March 21, 1995, and approved by the CBCAC on May 3, 1995. Development projects for which Critical Area findings were made prior to January 4, 1988, (i.e., interim findings as required by Natural Resources Article, Section 8-1813) are also subject to CAMP requirements in the event that such projects require additional public actions after the effective date of the City's CAMP.

The City's CAMP was next reviewed and was repealed and reordained by Ordinance 02-350, effective June 13, 2002 and approved by the Chesapeake Bay Critical Area Commission on November 13, 2002. The terms and conditions contained herein reflect the most current amendments to the CAMP.

B. Enforcement

1. Enforcement

Violation of the provisions of this CAMP document shall be dealt with in the manner provided for in the applicable Critical Area provisions of the City Code. Penalty citations are as follows:

- a. Stormwater management violations-Article 7-Natural Resources, Subtitle 26-3, City Code (Edition 2000).
- b. Zoning violations-Article-Zoning, Section 17-501-507, City Code (Edition 2000).

- c. Building Code violations-Article 32-Building Code, Section 116.2-116.3, City Code (Edition 2000).

2. Tree Replacement or Tree Mitigation

Any tree replacement or mitigation plan must have the prior written approval of the Director of Planning. No occupancy permit shall be issued until the tree replacement or mitigation plan has been completed or until an escrow account or non-revocable letter of credit has been established in the name of the Mayor and City Council of Baltimore. Such account shall be for an amount equal to the total estimated cost of the tree replacement or mitigation plan plus forty percent contingencies and project management fees in the event the developer fails to implement the plan.

3. Restoration

Any development, redevelopment, construction or excavation undertaken in violation of any provision of this CAMP document shall promptly be corrected after written notice from the Director of Planning. The property owner shall have thirty days from the receipt of such written notice in order to correct any violations.

4. Civil and criminal penalties

In addition to other penalties prescribed by law, any person, firm, corporation or other legal entity that violates any provision of this Plan shall be subject to a civil fine of \$500, and such person or entity shall be deemed guilty of a separate offense for every day such violation shall continue after notice thereof.

5. Requirements for Development, Redevelopment and Certain Uses within Critical Area of the City of Baltimore

All Critical Area requirements are detailed in this CAMP document, which may be purchased from the Department of Planning. Detailed requirements for stormwater management, including quantity and quality requirements in the Critical Area, may be found in the Stormwater Management Design Manual, which can be purchased from the Department of Public Works.

C. Critical Area Review Process

1. Introduction

Review of all site plans and proposals within the City's Critical Area is the responsibility of Baltimore City Department of Planning. The Department of Planning will determine if a development proposal meets local Critical Area requirements for "significant" development. If a project is deemed significant, the following is the minimum that will be requested:

- a. Three copies of the site plan (use the Site Plan Review Committee Requirements list-in Section X);
- b. Three copies of the mitigation/landscaping plan with planting details, spacing and species;
- c. Three copies of Worksheet A showing the proposed pollution reduction method (in Section X);
- d. Two copies of the Habitat Protection Assessment and the "Habitat Assessment Field Form"[Worksheet"] if there will be any encroachment in a Designated Habitat Protection Area. These forms are available in the Planning Department. A Forest Stand Delineation if required.
- e. A copy of the CAMP Program Certification and Landscape Maintenance Agreement (in Section X). These must be copied onto the landscape plan and signed.

The Department of Planning will then distribute these documents to the Department of Public Works for a technical water quality review and to the Critical Area Commission in Annapolis as required by the Critical Area Act. The Department of Public Works will check the applicant's runoff pollution reduction requirements and the proposed best management practices. Determinations of Buffer establishment and all additional requirements are the responsibility of the Department of Planning. Once these agencies have specified how the project shall meet these requirements, the developer shall provide plans that comply with the requirements and/or provide a written statement of intent regarding any applicable offsets to the responsible Departments. When the developer has submitted development plans and/or a statement of intent regarding offsets, the Department of Planning will again review the plans for compliance to meet local Critical Area requirements. All developers will be required to meet any

additional Building Code or other code requirements before the building permit is issued.

2. Inter-Agency Coordination

The Department of Planning has established notification and review procedures to insure timely and maximum communication among affected City agencies. To the extent possible, these procedures utilize existing plans and permits review mechanisms. Inter-agency coordination is currently built into these review processes, which allows Federal, State and local agencies the opportunity to review Critical Area compliance as well.

Key agencies reviewing all significant development projects in the Critical Area include the:

Department of Planning
Department of Public Works
Department of Housing and Community Development

The City Health and Fire Departments review all development that involves the generation, storage or use of hazardous, toxic or nutrient materials. The City Law Department is consulted as necessary.

3. Building and Occupancy Permits and Inspections

A developer will not be issued an occupancy permit or certificate of completion unless or until the City has certified that the on-site vegetation and/or runoff pollution reduction systems have been installed in a satisfactory manner. Once the developer has demonstrated that all on-site requirements have been completed, the City will re-inspect the property to certify that Critical Area requirements have been satisfied.

In cases where the Director of Planning determines that Critical Area requirements may be satisfied off-site through one or both of the offset programs, an occupancy permit or certificate of completion for the property will not be issued until and unless the developer has fully complied with offset agreements. The Department of Planning shall determine compliance with offset agreements.

The Director of Planning, in conjunction with other responsible City agencies, will effectuate procedures to assure that proper compliance with Critical Area requirements occurs prior to issuance of occupancy permits.

4. Disputes Arising From Critical Area Determinations; Hearings

In the event that a developer disputes a determination rendered by a City agency pursuant to the Critical Area review process, the developer may appeal the determination by presenting a written request for a hearing to the applicable agency describing fully the nature and extent of disagreement with the determination. The affected agency shall conduct an administration hearing regarding the dispute promptly in accordance with the City Code. The affected agency shall then notify the developer of its decision. A copy of the decision, available in the City's Legislative Reference office, along with the developer's original request for a hearing, shall be forwarded to the Chesapeake Bay Critical Area Commission.

Such appeals shall be made as follows:

a. City Code (Edition 2000):

- (i) Zoning appeals shall be filed with the Baltimore Zoning Administrator and forwarded to the Baltimore Board of Municipal and Zoning Appeals for a hearing, in accordance with Article-Zoning 17-201-204;
- (ii) Stormwater Management appeals shall be filed with the Director of the Department of Public Works, in accordance with Article 7-Natural Resources;
- (iii) Building Permit and Occupancy Permit appeals shall be filed with the Commissioner of the Department of Housing and Community Development, in accordance with Article 32-Building Code.

b. City Charter (1995):

Other appeals from determinations of the Director of the Department of Planning regarding the CAMP provisions shall be made to the Planning Commission pursuant to Article 32-Building Code.

5. Additional Appeals

Further appeal from any decision rendered by the hearing officers or bodies specified above may be taken to the Circuit Court for the City of Baltimore, as follows:

- a. Baltimore Board of Municipal and Zoning Appeals, proceeds in accordance with Article VII, Section 88 (City Charter, 1995) or Article-Zoning (City Code, Edition 2000).
- b. Director of Public Works, proceeds in accordance with Article 7 (City Code, Edition 2000).
- c. Commissioner of Housing and Community Development proceeds in accordance with Article 32 (City Code, Edition 2000).
- d. Planning Commission proceeds in accordance with Article VII, Section 79 (City Charter, 1995).

6. Variances

- a. Variances from the provisions of this CAMP may be granted by the Baltimore Board of Municipal and Zoning Appeals when, owing to special features of a site or other circumstances, implementation of this CAMP by the City or a literal enforcement of CAMP provisions would result in unwarranted hardship to an applicant, in accordance with COMAR 27.01.11. The provisions for granting such a variance shall include evidence submitted by the applicant that the following standards are met:
- b. Standards. The City shall make findings which demonstrate that the variance request meets the following standards:
 - (i) Special conditions or circumstances exist that are peculiar to the land or structure involved and that a literal enforcement of the provisions and requirements of the City's Critical Area Management Program would result in unwarranted hardship.
 - (ii) A literal interpretation of the provisions of the Critical Area Management Program and related ordinance will deprive the applicant of rights commonly enjoyed by other properties in similar areas within the Critical Area.
 - (iii) The granting of a variance will not confer upon an

- applicant any special privilege that would be denied by the City Critical Area Management Program to other lands or structures within the Critical Area.
- (iv) The variance request is not based upon conditions or circumstances which are the result of actions by the applicant, nor does the request arise from any condition relating to land or building use, either permitted or non-conforming on any neighboring property.
 - (v) The granting of a variance will not adversely affect water quality or adversely impact fish, wildlife or plant habitat within the Critical Area and the granting of the variance will be in harmony with the general spirit and intent of the Critical Area Act and the City Critical Area Management Program.
 - (vi) Applications for a variance will be made in writing to the Baltimore Board of Municipal and Zoning Appeals, the Department of Planning and the Critical Area Commission.
- c. Process: After hearing an application for a Critical Area Management Program variance, the Baltimore Board of Municipal and Zoning Appeals shall make findings reflecting analysis of each standard. The City shall notify the Critical Area Commission of its findings and decision to grant or deny the variance request.
- d. Appeals: Appeals of decisions concerning the granting or denial of a variance under these regulations shall be taken in accordance with all applicable laws and procedures of the City for variances. Variance decisions by the Baltimore Board of Municipal and Zoning Appeals may be appealed to the Circuit Court in accordance with the Maryland Rules of Procedure. Appeals may be taken by any person, firm, corporation or governmental agency aggrieved or adversely affected by any decision made under this section.
- e. Conditions and Mitigation: The Baltimore Board of Municipal and Zoning Appeals may impose conditions on the use or development of a property which is granted a variance as it may find reasonable to ensure that the spirit and intent of the CAMP is maintained including but not limited to the following:
- (i) Impacts resulting from the granting of the variance shall be

mitigated by planting on the site per square foot of the variance granted at no less than a 3:1 basis or as recommended by City staff.

- (ii) New or expanded structures or impervious surfaces shall be located the greatest possible distance from mean high water, the landward edge of tidal wetlands, tributary streams, non-tidal wetlands, or steep slopes.

7. Document Corrections

The Director of Planning and the Critical Area Commission are authorized to correct any typographical errors, eliminate redundant or extraneous material or rearrange portions of Baltimore's CAMP document from time to time, provided the Baltimore Law Department concurs that any such corrections do not constitute changes in the City's adopted program within the intent of Title 8, Subtitle 18 of the Natural Resources Article of the Annotated Code of Maryland and other applicable State or City laws.

8. Program Amendments

The Planning Department and the City Council may from time to time amend the Baltimore CAMP. All such amendments shall be approved by the Critical Area Commission as established in Section 8-1809 of the Critical Area Act. No such amendment shall be implemented without approval of the Critical Area Commission. Standards and procedures for the Critical Area Commission approval of proposed amendments are as set forth in the Critical Area Act Section 8-1809 (I) and Section 8-1809 (d), respectively. In addition, the Department of Planning and the City Council shall review the entire program and propose any necessary amendments as required at least every six (6) years.

- a. Process: When an amendment is requested, the applicant shall submit the amendment to the Planning Commission for review. Upon completing Findings of Fact, these documents shall be forwarded to the City Council. The City Council shall hold at least one public hearing at which parties of interest and citizens shall have an opportunity to be heard. At least fifteen (15) days notice of the time and place of such hearing shall be published in a newspaper of general circulation in Baltimore. The City Council shall forward the approved amendment request to the Critical Area Commission for final approval.

b. Zoning and map amendments: Except for program amendment or program refinements developed during a six-year comprehensive review, a zoning map amendment may only be granted by the City upon proof of a mistake in the existing zoning. This requirement does not apply to proposed changes to a zoning map that meets the following criteria:

- (i) Are wholly consistent with the land classifications in the adopted program; or
- (ii) Propose the use of growth allocation in accordance with the adopted program.

9. Conflicts with other Codes, Ordinances and Regulations

In some instances the application of the Critical Area Management Program may create conflicts with other City Codes, Ordinances or Regulations. In these situations, the stricter provisions shall apply.

X. MATERIALS NEEDED FOR COMPLIANCE

CITY OF BALTIMORE
CHESAPEAKE BAY CRITICAL AREA MANAGEMENT PROGRAM

Worksheet A: Standard Application Process

Calculating Pollutant Removal Requirements *

1/12/04

Step 1: Project Description

A. Calculate Percent Imperviousness

- 1) Site Area within the Critical Area IDA, Acreage = _____ acres
- 2) Site Impervious Surface Area, Existing and Proposed

	(a) Existing (acres)	(b) Post-Development (acres)
Rooftop	_____	_____
Roads	_____	_____
Sidewalks	_____	_____
Parking lots	_____	_____
Pools/ponds	_____	_____
Decks	_____	_____
Other	_____	_____
Impervious Surface Area	_____	_____

Imperviousness (I)

Existing Impervious Surface Area/Site Area = (Step 2a)/(Step 1)= _____

Post-Development Impervious Surface Area/Site Area = (Step 2b)/(Step 1)= _____

B. Define Development Category (circle)

- 1) Redevelopment Existing imperviousness greater than 15% I (*Go to Step 2A*)
- 2) New development Existing imperviousness less than 15% I (*Go to Step 2B*)

*NOTE: All acreage used in this worksheet refer to areas within the Intensely Developed Areas of the Critical Area only

Step 2: Calculate the Pre-Development Load (Lpre)

A. Redevelopment

$$L_{pre} = (R_v) (C) (A) (8.16)$$

$$R_v = 0.05 + 0.009 (I_{pre})$$

$$= 0.05 + 0.009 (\text{_____}) = \text{_____}$$

$$L_{pre} = (\text{_____}) (\text{_____}) (\text{_____}) 8.16$$

$$= \text{_____} \text{ lbs/year of total phosphorous}$$

Where:

L_{pre} = Average annual load of total phosphorous exported from the site prior to development (lbs/year)

R_v = Runoff coefficient, which expresses the fraction of rainfall which is converted into runoff

I_{pre} = Pre-development (existing) site imperviousness (i.e., $I=75$ if site is 75% impervious)

C = Flow-weighted mean concentration of the pollutant (total phosphorous) in urban runoff

= 0.30 (milligrams per liter)

A = Area of the site within the Critical Area Intensely Developed Area (IDA) in acres

8.16 = Includes regional constants and unit conversion factors

B. New Development

$$L_{pre} = (0.5) (A)$$

$$= (0.5) (\text{_____})$$

$$= \text{_____} \text{ lbs /year of total phosphorous}$$

$$L_{pre} = \text{Same as above}$$

0.5 = Annual total phosphorous load from undeveloped lands (lbs/acre/year)

A = Same as above

Step 3: Calculate the Post-Development Load (L Post)

A. New Development and Redevelopment

$$L_{\text{post}} = (R_v) (C) (A) (8.16)$$

$$\begin{aligned} R_v &= 0.05 + 0.009 (I_{\text{post}}) \\ &= 0.05 + 0.009 (\text{_____}) = \text{_____} \end{aligned}$$

$$\begin{aligned} L_{\text{post}} &= (\text{_____})(\text{_____})(\text{_____}) (8.16) \\ &= \text{_____} \text{ lbs P/year} \end{aligned}$$

where:

L_{post} = Average annual load of total phosphorous exported from the post development site (lbs/year)

R_v = Runoff coefficient, which expresses the fraction of rainfall which is Converted into runoff

I_{post} = Post-development (proposed) site imperviousness (i.e., $I = 75$ if site is 75% impervious)

C = Flow-weighted mean concentration of the pollutant (total phosphorous) in urban runoff

C = 0.30 milligrams per liter

A = Area of the site within the Critical Area Intensely Developed Area (IDA) in acres

8.16 = Includes regional constants and unit conversion factors

Step 4: Calculate the Pollutant Removal Requirement (RR)

$$\begin{aligned}
 RR &= L_{\text{post}} - (0.9) (L_{\text{pre}}) \\
 &= (\text{_____}) - (0.9) (\text{_____}) \\
 &= \text{_____} \text{ lbs/year of total phosphorous}
 \end{aligned}$$

Where:

RR = Pollutant removal requirement (lbs/year)

L_{post} = Average annual load of total phosphorous exported from the post development site (lbs/year)

L_{pre} = Average annual load of total phosphorous exported from the site prior to development (lbs/year)

Step 5: Identify Feasible Urban BMP

Select Best Management Practice options from the 2003 10% Rule Guidance Manual, Table 4.8 (%) at the Critical Area WEB site: <http://www.dnr.state.md.us/criticalarea/> Calculate the load removed for each option.

BMP	(L _{post})	x	(BMP _{pre})	(% DA Served)	LR
_____	_____	x	_____	x _____	=_____ lbs/year
_____	_____	x	_____	x _____	=_____ lbs/year
_____	_____	x	_____	x _____	=_____ lbs/year
_____	_____	x	_____	x _____	=_____ lbs/year

Load Removed, LR (total) = _____ lbs/year

Pollutant Removal Requirement, RR (from Step 4) = _____ lbs/year

Where:

Load Removed, LR = Annual total phosphorous load removed by the proposed BMP
(lbs/year)

Lpost = Average annual load of total phosphorous exported from the post development
site (lbs/year)

BMP_{Pre} = BMP removal efficiency for total phosphorus, Table 4.8 (%)

% DA
Served = Fraction of the site area within the Critical Area IDA served by the BMP (%).

RR = Pollutant removal requirement (lbs/year)

HAS THE RR (POLLUTANT REMOVAL REQUIREMENT) BEEN MET?

____ **YES** ____ **NO**

If the Load Removed is equal to or greater than the pollutant removal requirement (RR)
calculated in Step 4, then the on-site BMP option complies with the 10% Rule.

REQUIREMENTS FOR FINAL SITE PLAN REVIEW

All plans are to show the following information:

1. The specific address/es of the lot/s involved. A street address is preferred.
2. Plans drawn to scale at either 1" = 20' or 1" = 40'.
3. The date that the plan was prepared, with revised plans indicating the date of each revision.
4. A north arrow, preferably with the plan oriented so that north is at the top of the plan.
5. Lot lines and dimensions for all lots involved. If lot lines are proposed for change, show and label existing and proposed lines.
6. The location and size (dimensions and # of stories where appropriate) of all existing and proposed improvements on the site, such as buildings, additions, walls, fences, tanks (above and below ground), paving (specific type), planters, porches, oriel, bay windows, or other similar projections (above and below grade).
7. The use and type of construction for all the buildings on the site.
8. Footprints and uses of buildings on lots adjacent to the site.
9. Distance between the site and the nearest intersecting street.
10. Streets and alleys that are adjacent to the site, by name and width. (may be obtained from the Property Location Section of the Department of Public Works, 410-396-3631).
11. Location of bus stops and/or rail stations.
12. Curb cuts along the site, adjacent to the site, and across the street from the site, with location and width. Ingress and egress (driveways) are to be noted and labeled (i.e. entrance and exit, with direction, if one-way). Sidewalks, alleys, footways, and public easements should also be shown. Sidewalk detail, such as street trees, bus shelters and fire hydrants should be noted.
13. Location of on-street parking meters. Location and layout of parking lot(s), with dimensions of parking spaces, widths of aisles, and the total number of spaces on each lot. Designate handicapped spaces.
14. Grades and/or topography to indicate both slopes and drainage.
15. Chesapeake Bay Critical Area 1,000' boundary and 100' Buffer, if applicable. (Contact Duncan Stuart at 410.396.5902 for assistance).
16. Landscape plan with plant type and size (caliper) indicated. (Area of disturbance and other ground cover detail is desirable and may be requested by the Committee).
17. The name, address, and telephone number of a person we can contact for questions.

The Site Plan Review Committee meets every Tuesday morning. To schedule a review, please contact Chris Ryer at (410) 396-4488.

CITY OF BALTIMORE
CHESAPEAKE BAY CRITICAL AREA MANAGEMENT PROGRAM

PROGRAM CERTIFICATION/LANDSCAPE MAINTENANCE
AGREEMENT FORM

City of Baltimore, Maryland
Department of Planning

Directions:

Once the City has notified you that the Critical Area submittal has been approved:

1. Send one signed copy of this Program Certification/Landscape Maintenance Form to: Mr. Duncan Stuart, Critical Area Coordinator, City of Baltimore Department of Planning, 417 East Fayette Street-8th Floor, Baltimore, MD 21201. Phone: 410-396-5902, FAX: 410-244-7358, e-mail: duncan.stuart@baltimorecity.gov
2. Attach/splice one copy onto the a) landscaping plans and, b) Best Management Practice sheet(s) of the plans accompanying the building permit application.

I am aware of the requirements of the City of Baltimore Critical Area Management Program and I agree to comply with these regulations and all applicable policy, guidelines and ordinances. I further agree to:

1. Certify installation of the approved Best Management Practice(s), to maintain such practices and have signed, if appropriate, a Declaration of Covenants-Inspection/Maintenance Agreement for Stormwater Management Facility and filed it with the Department of Public Works, Construction Management Division.
2. Certify installation of the Landscaping/Planting Plan not later than one (1) year from the date of occupancy to the Baltimore City Planning Department, 417 E. Fayette Street, 8th Floor, Baltimore, MD 21202.
3. Certify implementation of the landscape maintenance agreement listed in items A-F below. I shall be responsible for this maintenance and tree care for a period of two years. Services shall include, but not be limited to the following:

A. WATERING

- Watering shall be provided during the growing season as required.
- First Growing Season: Once per week.

- Second and Subsequent Growing Seasons: As needed, but not less than once per month during July and August. This includes trees planted in the sidewalk and the public right-of-way.

B. REINFORCEMENT OF PLANTING REQUIREMENTS

- A minimum of 100% of the total number of trees is required to survive at the end of the two-year maintenance period.

C. MOWING AND FERTILIZER USE

- Mowing: Areas requiring mowing should be kept to a minimum. If mowing is necessary, raise the lawn mower blade to at least 3 inches. This will reduce soil erosion, increase water absorption, and increase turf drought tolerance. On areas that are lawn that do not require close mowing, allow the grass to attain a height of at least 10 inches. Mowing in these areas is permitted once per year in the fall after September.
- Fertilizer, Pesticides and Herbicides: Avoid the use of any fertilizer, especially those containing phosphorous or nitrogen, chemical pesticides and herbicides. If pest (rat) control is necessary, use integrated pest management, which limits pesticide applications to times when a problem is actually present. Remove all human waste sources: garbage, spoiled food, pet excrement, etc.-these are all rodent food sources.

D. STORMWATER FACILITIES

- Plantings in stormwater facilities/Best Management Practices are to be left alone to provide habitat for birds and other species. Do not mow grass or other plants in these areas, but keep trash cleaned out.

E. CONTROL OF INVASIVE PLANT SPECIES

- Phragmites, ailanthus (Tree-of-Heaven) and other non-native plant removal shall be undertaken in any areas on-site for a minimum of two years. Invasive, non-native plants will overtake the newly planted, native landscaping plants and create a monoculture unless controlled. Non-native, invasive plants should be spot-controlled using a combination of "Rodeo" herbicide, hand cutting and weeding. Care should be taken not to spray any newly planted, native plants.

F. PROTECTION FROM DISEASE AND INJURY

- Periodic inspection shall be made for any evidence of disease or damage.

Developer's Signature	Date
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Owner's Name	Date
--------------	------

Owner's Signature	Date
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**CRITICAL AREA STORMWATER OFFSET FEE CALCULATION FOR THE 10%
POLLUTANT REMOVAL REQUIREMENT**

11/3/2001

Using information from Worksheet A, calculate the offset fee:

1. Calculate the removal capability needed and find the precipitation depth in inches:

Long term phosphorous removal needed =

Pollutant Removal Required x 100/Post Development Load=

Go to the attached % Annual Phosphorous Removal for Given Filtration Volumes Chart¹. Find the "Long-term % Phosphorous Removal" value. Move horizontally until the curve is met for "Precipitation Depth (Inches)" This is the "P" value for the final formula. (Note: Minimum precipitation depth is .10)

1B. Precipitation Depth (Inches) = _____

2. Calculate offset fee by first calculating the Runoff Volume: $V = ((P) R_v / 12) (A)$

V = Runoff Volume

P = Precipitation Depth (see 1B. of this sheet)

R_v = Runoff Coefficient (see R_v in Step 3 of Worksheet A)

A = Site Acreage in square feet

Calculate the runoff volume: $V = \frac{(P) R_v}{12} (A)$

2A. $V = \left(\frac{\quad}{12} \right) \quad \times \quad$

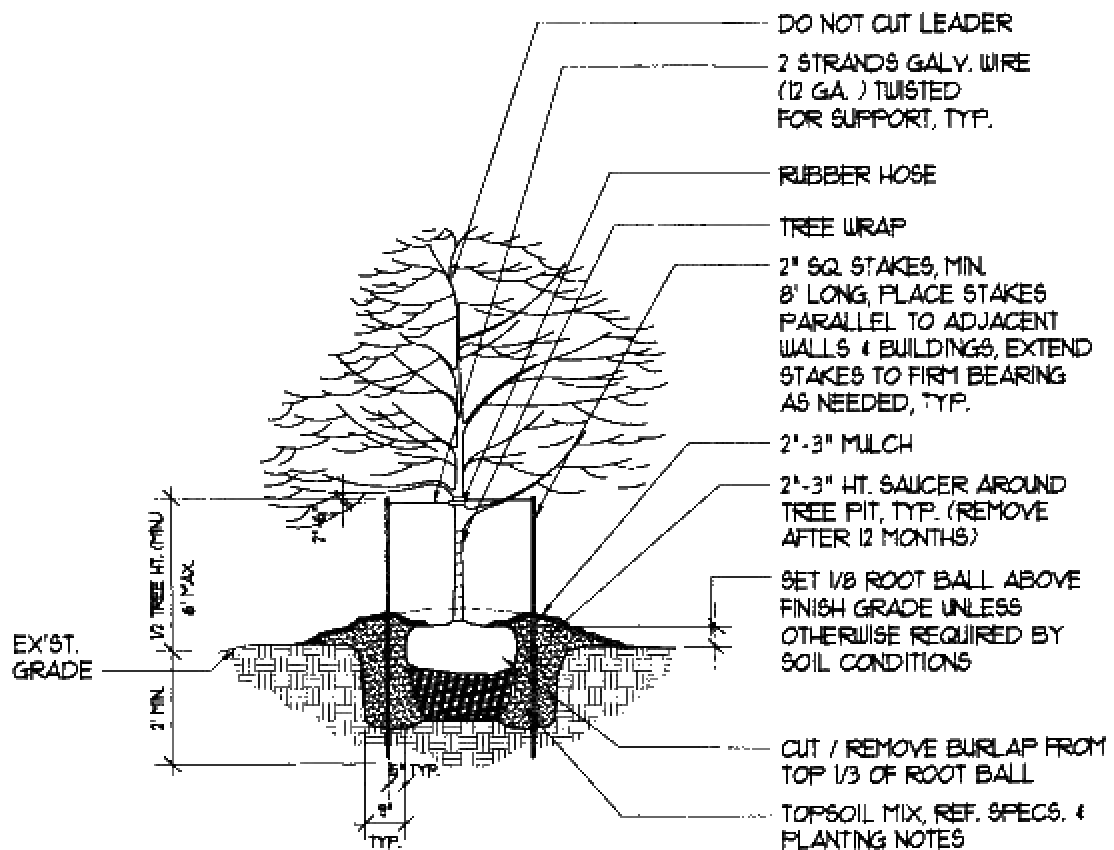
Calculate Offset Fee en lieu: \$9.61 (V) + \$950.00

\$9.61 x _____ = _____ + \$950 = _____

2B. OFFSET FEE = _____

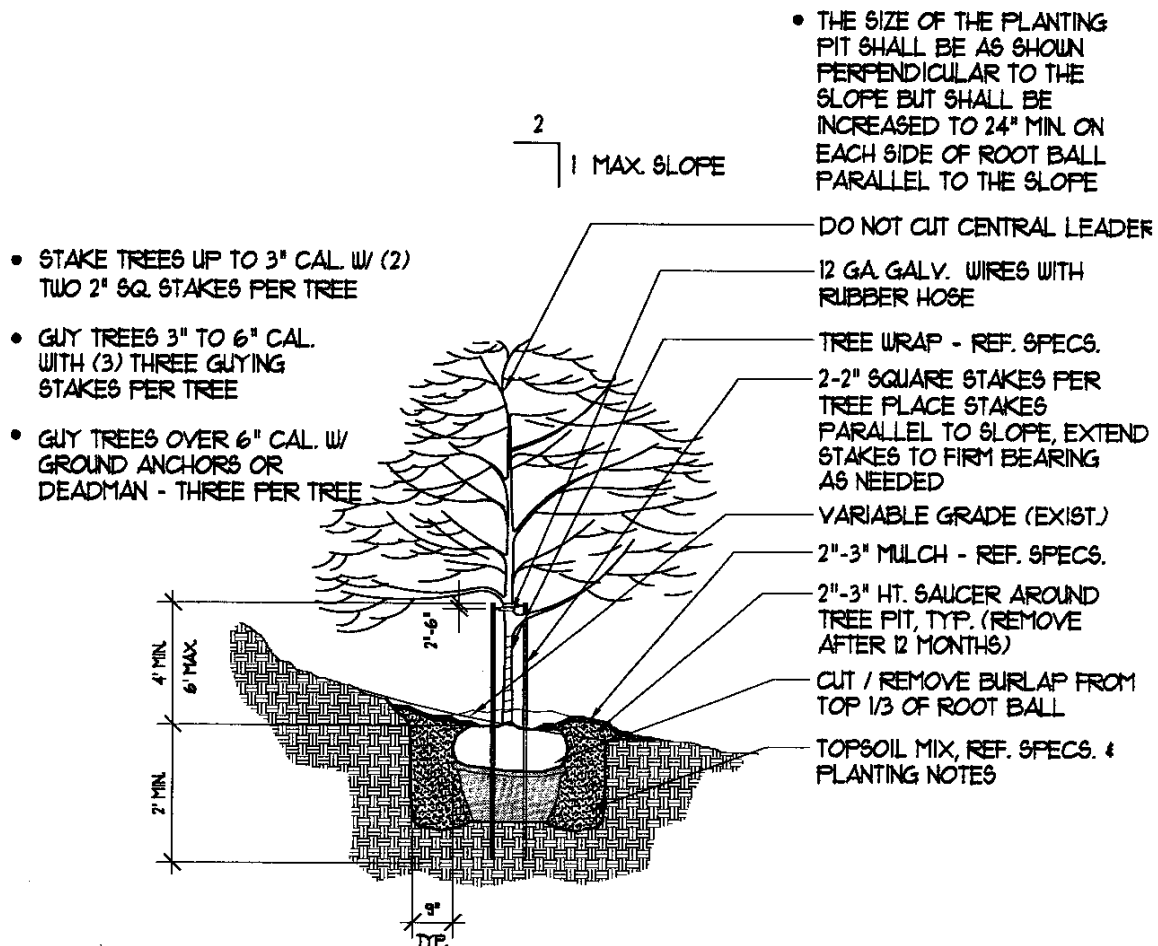
Source: Stormwater Management Design Manual

¹ Critical Area Runoff Pollution Control Manual, Department of Public Works Water quality Management Office, April 13, 1988



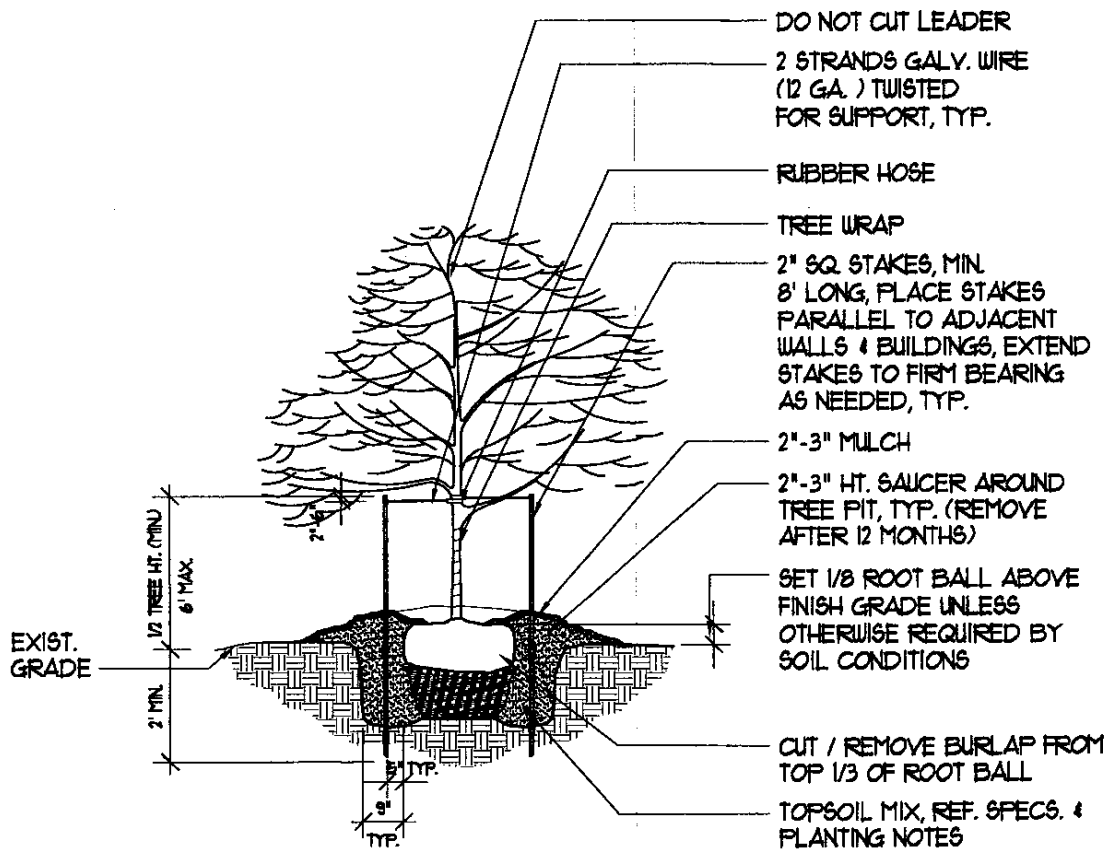
DECIDUOUS TREE PLANTING (≤ 3" Cal.)

Drawing provided by Design Collective, Inc.



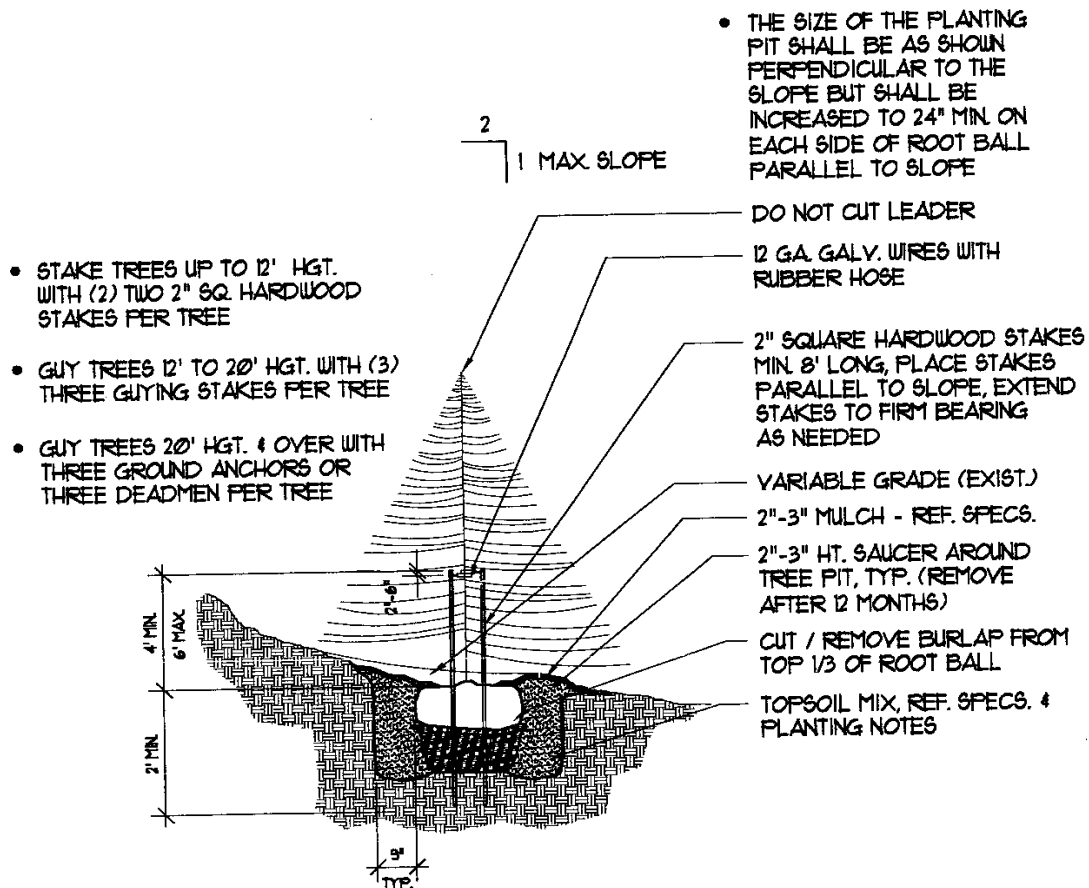
DECIDUOUS TREE PLANTING ON SLOPE

Drawing provided by Design Collective, Inc.



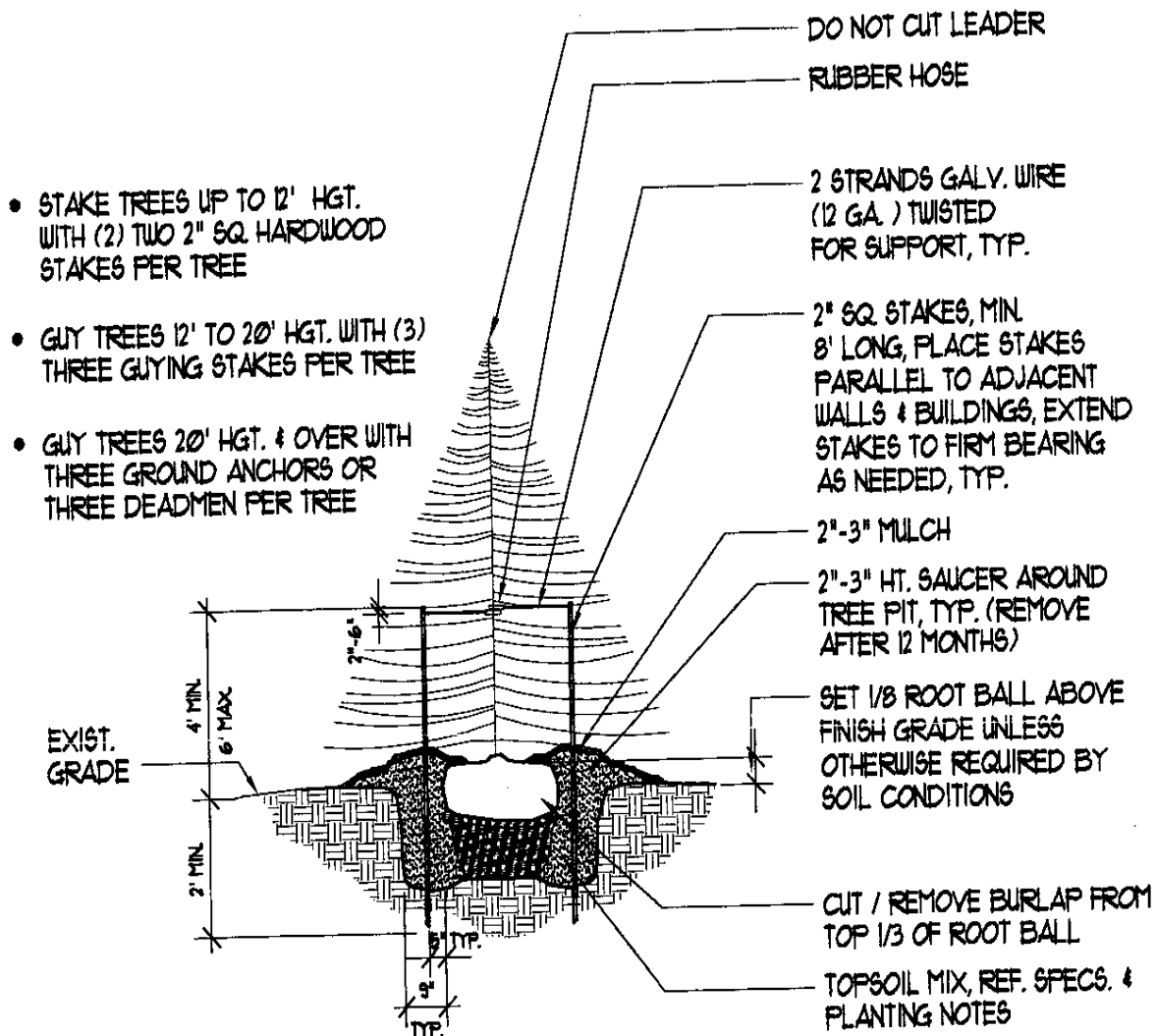
DECIDUOUS TREE PLANTING (≤3" Cal.)

Drawing provided by Design Collective, Inc.



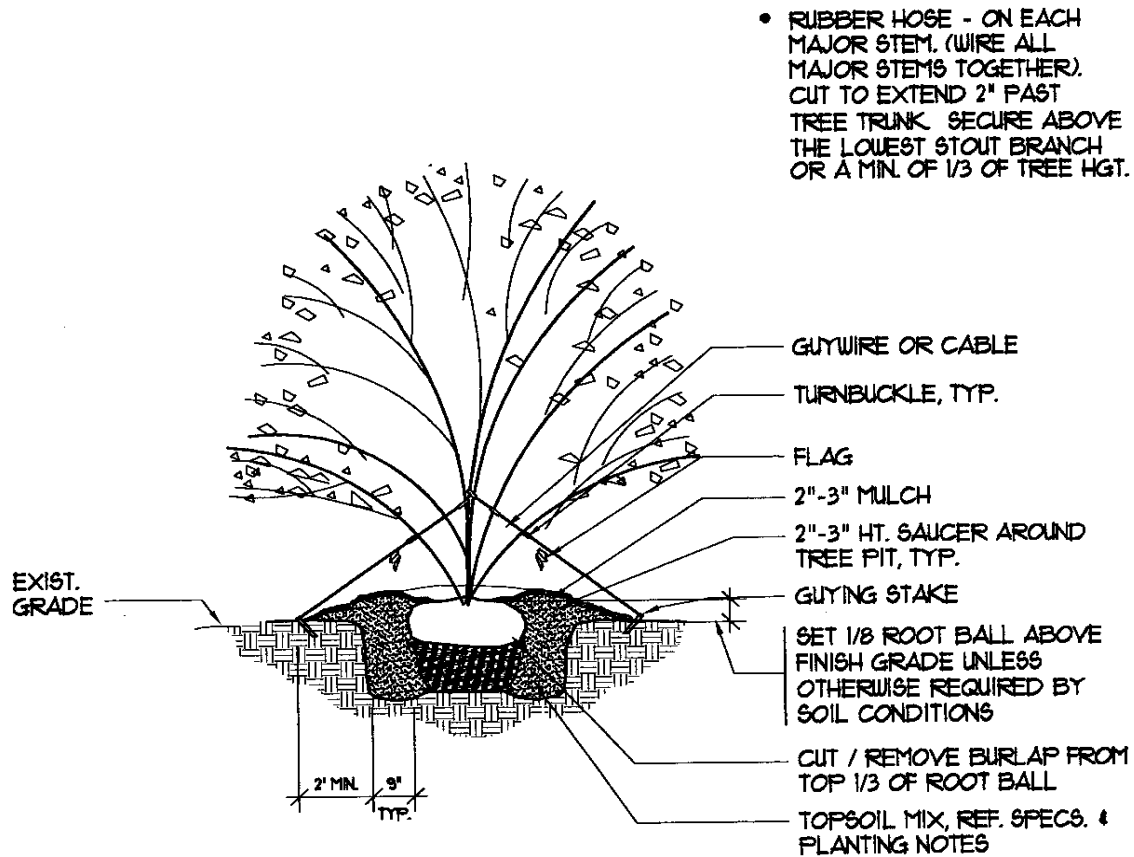
EVERGREEN TREE PLANTING ON SLOPE

Drawing provided by Design Collective, Inc.



EVERGREEN TREE PLANTING

Drawing provided by Design Collective, Inc.



MULTI-STEM DECID. TREE PLANTING

Drawing provided by Design Collective, Inc.

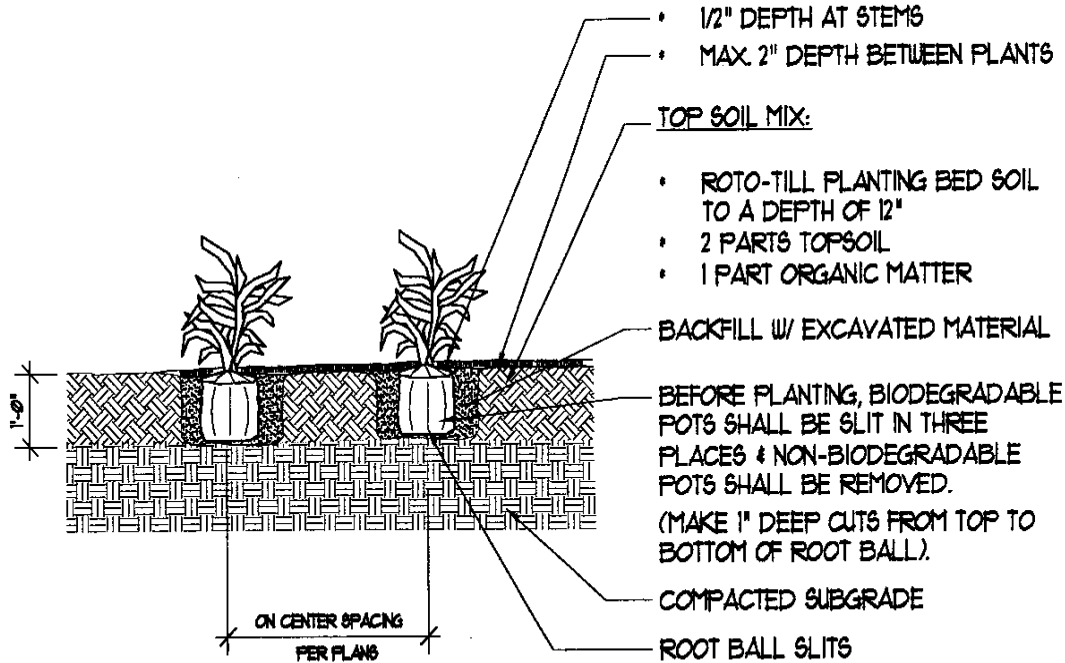
- WHEN BARE ROOT IS SPECIFIED, THE PLANTS SHALL BE PLANTED W/ THE ROOTS COVERED TO THE CROWN & SURROUNDED BY SOIL BELOW THE MULCH

SHREDDED BARK MULCH:

- 1/2" DEPTH AT STEMS
- MAX. 2" DEPTH BETWEEN PLANTS

TOP SOIL MIX:

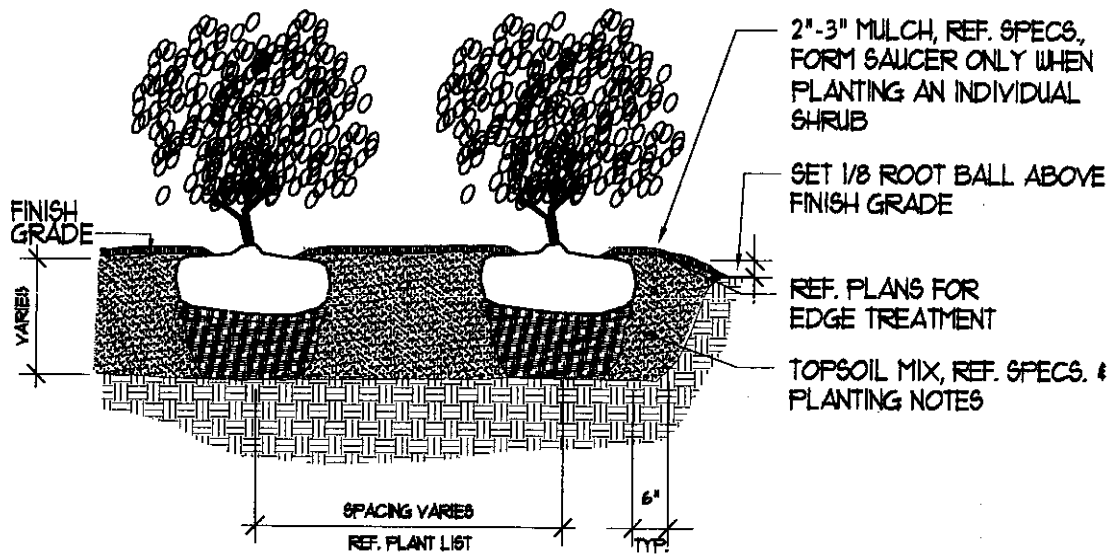
- ROTO-TILL PLANTING BED SOIL TO A DEPTH OF 12"
- 2 PARTS TOPSOIL
- 1 PART ORGANIC MATTER



PERENNIAL/GROUNDCOVER PLANTING

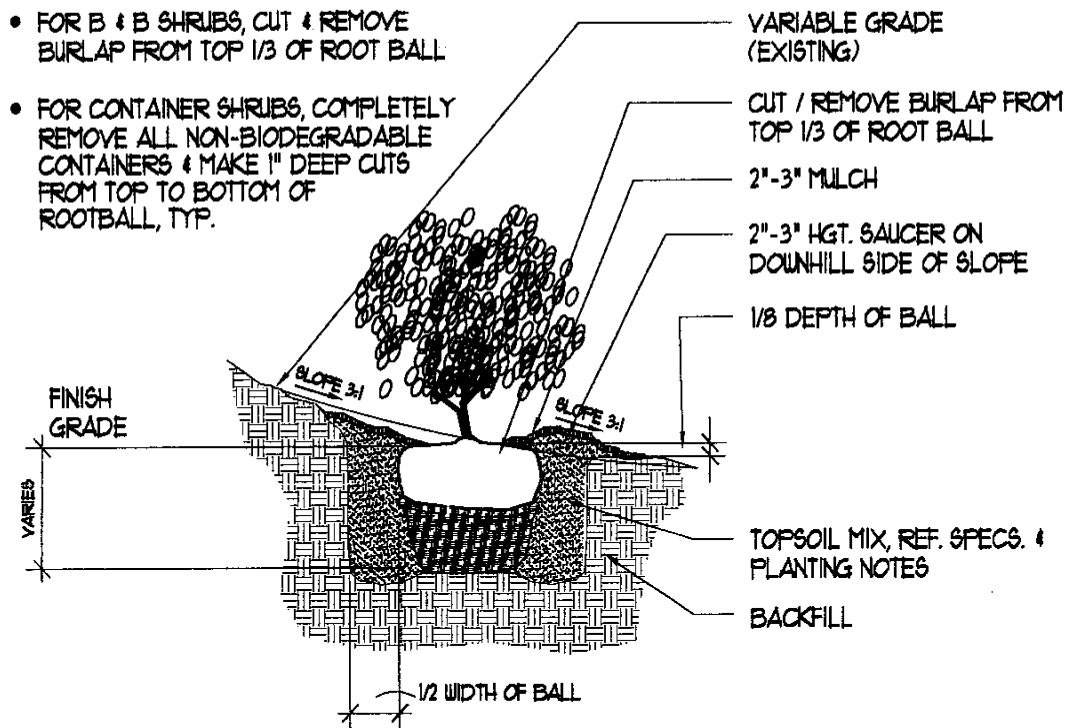
Drawing provided by Design Collective, Inc.

- FOR B & B SHRUBS, CUT & REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL
- FOR CONTAINER SHRUBS, COMPLETELY REMOVE ALL NON-BIODEGRADABLE CONTAINERS & MAKE 1" CUTS FROM TOP TO BOTTOM OF ROOTBALL



SHRUB BED PLANTING

Drawing provided by Design Collective, Inc.



SHRUB BED PLANTING ON SLOPE

Drawing provided by Design Collective, Inc.

XI. DEFINITIONS

THE FOLLOWING TERMS HAVE BEEN INCORPORATED INTO THE CITY OF BALTIMORE CRITICAL AREA MANAGEMENT PROGRAM. EACH OF THESE TERMS HAS THE MEANING INDICATED BELOW.

- (1) "AFFORESTATION" MEANS THE ESTABLISHMENT OF FOREST COVER ON AN AREA FROM WHICH IT HAS ALWAYS OR VERY LONG BEEN ABSENT, OR THE PLANTING OF OPEN AREAS WHICH ARE NOT PRESENTLY IN FOREST COVER (SOURCE: BALTIMORE CITY CODE, ARTICLE 7, DIVISION IV, SUBTITLE 41-48, FOREST AND TREE CONSERVATION).

"ANADROMOUS FISH" MEANS FISH THAT TRAVEL UPSTREAM (FROM THEIR PRIMARY HABITAT IN THE OCEAN) TO FRESHWATERS IN ORDER TO SPAWN.

- (2) "ANADROMOUS FISH PROPAGATION WATERS" MEANS THOSE STREAMS THAT ARE TRIBUTARY TO THE CHESAPEAKE BAY WHERE SPAWNING OF ANADROMOUS SPECIES OF FISH (E.G., ROCKFISH, YELLOW PERCH, WHITE PERCH, SHAD, AND RIVER HERRING) OCCURS OR HAS OCCURRED. THE STREAMS ARE DESIGNATED BY THE TIDEWATER ADMINISTRATION. FOR PURPOSE OF THIS PROGRAM "STREAMS" REFERS TO DESIGNATED ANADROMOUS FISH PROPAGATION WATERS WITHIN THE CRITICAL AREA.

- (3) "BARGE" MEANS A NON-SELF-PROPELLED VESSEL, EXCLUDING HISTORIC MUSEUM VESSELS.

- (4) "BARREN LAND" MEANS UNMANAGED LAND HAVING SPARSE VEGETATION.

- (5) "BEST MANAGEMENT PRACTICES (BMPS)" MEANS CONSERVATION PRACTICES OR SYSTEMS OF PRACTICES AND MANAGEMENT MEASURES THAT CONTROL SOIL LOSS AND REDUCE WATER QUALITY DEGRADATION CAUSED BY NUTRIENTS, ANIMAL WASTE, TOXICS, AND SEDIMENT

- (6) "BUFFER" MEANS AN EXISTING, NATURALLY VEGETATED AREA OR VEGETATED AREA ESTABLISHED OR MANAGED TO PROTECT AQUATIC, WETLAND, SHORELINE, AND TERRESTRIAL ENVIRONMENTS FROM MAN-MADE DISTURBANCES.

- (7) "BROWNFIELD" MEANS ABANDONED, IDLED, OR UNDERUSED INDUSTRIAL

OR COMMERCIAL FACILITIES WHERE EXPANSION AND REDEVELOPMENT IS COMPLICATED BY REAL OR PERCEIVED CONTAMINATION (U.S. ENVIRONMENTAL PROTECTION ADMINISTRATION).

- (8) "CLEARCUTTING" MEANS THE REMOVAL OF THE ENTIRE STAND OF TREES IN ONE CUTTING WITH TREE REPRODUCTION OBTAINED BY NATURAL SEEDING FROM ADJACENT STANDS OR FROM TREES THAT WERE CUT, FROM ADVANCED REGENERATION OR STUMP SPROUTS, OR FROM PLANTING OF SEEDS OR SEEDLINGS BY MAN.
- (9) "COLONIAL NESTING WATER BIRDS" MEANS HERONS, EGRETS, TERNS, AND GLOSSY IBIS. FOR PURPOSES OF NESTING, THESE BIRDS CONGREGATE (THAT IS "COLONIZE") IN RELATIVELY FEW AREAS, AT WHICH TIME, THE REGIONAL POPULATIONS OF THESE SPECIES ARE HIGHLY SUSCEPTIBLE TO LOCAL DISTURBANCES.
- (10) "COMMERCIAL HARVESTING" MEANS A COMMERCIAL OPERATION THAT WOULD ALTER THE EXISTING COMPOSITION OR PROFILE, OR BOTH, OF A FOREST, INCLUDING ALL COMMERCIAL CUTTING OPERATIONS DONE BY COMPANIES AND PRIVATE INDIVIDUALS FOR ECONOMIC GAIN.
- (11) "COMMISSION" MEANS THE CHESAPEAKE BAY CRITICAL AREA COMMISSION.
- (12) "COMMUNITY PIERS" MEANS BOAT DOCKING FACILITIES ASSOCIATED WITH SUBDIVISIONS AND SIMILAR RESIDENTIAL AREAS, AND WITH CONDOMINIUM, APARTMENT, AND OTHER MULTIPLE-FAMILY DWELLING UNITS. PRIVATE PIERS ARE EXCLUDED FROM THIS DEFINITION.
- (13) "COMPREHENSIVE OR MASTER PLAN" MEANS A COMPILATION OF POLICY STATEMENTS, GOALS, STANDARDS, MAPS, AND PERTINENT DATA RELATIVE TO THE PAST, PRESENT, AND FUTURE TRENDS OF THE CITY OF BALTIMORE INCLUDING, BUT NOT LIMITED TO, ITS POPULATION, HOUSING, ECONOMICS, SOCIAL PATTERNS, LAND USE, WATER RESOURCES AND THEIR USE, TRANSPORTATION FACILITIES, AND PUBLIC FACILITIES, PREPARED BY OR FOR THE PLANNING DEPARTMENT.
- (14) "CONSERVATION EASEMENT" MEANS A NON-POSSESSORY INTEREST IN LAND, WHICH RESTRICTS THE MANNER IN WHICH THE LAND MAY BE DEVELOPED IN AN EFFORT TO RESERVE NATURAL RESOURCES FOR FUTURE USE.

- (15) "COVER CROP" MEANS THE ESTABLISHMENT OF A VEGETATIVE COVER TO PROTECT SOILS FROM EROSION AND TO RESTRICT POLLUTANTS FROM ENTERING THE WATERWAYS. COVER CROPS CAN BE DENSE, PLANTED CROPS OF GRASSES OR LEGUMES, OR CROP RESIDUES SUCH AS CORN, WHEAT, OR SOYBEAN STUBBLE WHICH MAXIMIZE INFILTRATION AND PREVENT RUNOFF FROM REACHING EROSION VELOCITIES.
- (16) "CRITICAL AREA" MEANS ALL LANDS AND WATERS DEFINED IN SECTION 8-1807 OF THE NATURAL RESOURCES, ANNOTATED CODE OF MARYLAND. THEY INCLUDE:
- i. ALL WATERS OF AND LANDS UNDER THE CHESAPEAKE BAY AND ITS TRIBUTARIES TO THE HEAD OF TIDE AS INDICATED ON THE STATE WETLANDS MAPS, AND ALL STATE AND PRIVATE WETLANDS DESIGNATED UNDER TITLE 9 OF THE NATURAL RESOURCES ARTICLE, ANNOTATED CODE OF MARYLAND;
 - ii. ALL LAND AND WATER AREAS WITHIN 1,000 FEET BEYOND THE LANDWARD BOUNDARIES OF STATE OR PRIVATE WETLANDS AND THE HEADS OF TIDES DESIGNATED UNDER TITLE 9 OF THE NATURAL RESOURCES ARTICLE, ANNOTATED CODE OF MARYLAND; AND
 - iii. MODIFICATION TO THESE AREAS THROUGH INCLUSIONS OR EXCLUSIONS PROPOSED BY THE CITY AND APPROVED BY THE CRITICAL AREA COMMISSION AS SPECIFIED IN SECTION 8-1807 OF THE NATURAL RESOURCES ARTICLE, ANNOTATED CODE OF MARYLAND.
- (17) "DEVELOPED WOODLANDS" MEANS THOSE AREAS OF 1 ACRE OR MORE IN SIZE WHICH PREDOMINANTLY CONTAIN TREES AND NATURAL VEGETATION AND WHICH ALSO INCLUDE RESIDENTIAL, COMMERCIAL, OR INDUSTRIAL STRUCTURES AND USES.
- (18) "DEVELOPMENT ACTIVITIES" MEANS THE CONSTRUCTION OR SUBSTANTIAL ALTERATION OF RESIDENTIAL, COMMERCIAL, INDUSTRIAL, INSTITUTIONAL, OR TRANSPORTATION FACILITIES OR STRUCTURES.
- (19) "DOCUMENTED BREEDING BIRD AREAS" MEANS FORESTED AREAS WHERE

THE OCCURRENCE OF INTERIOR DWELLING BIRDS, DURING THE BREEDING SEASON, HAS BEEN DEMONSTRATED AS A RESULT OF ON-SITE SURVEYS USING STANDARD BIOLOGICAL SURVEY TECHNIQUES.

- (20) "ECOSYSTEM" MEANS A MORE OR LESS SELF-CONTAINED BIOLOGICAL COMMUNITY TOGETHER WITH THE PHYSICAL ENVIRONMENT IN WHICH THE COMMUNITY'S ORGANISMS OCCUR.
- (21) "EXCESS STORMWATER RUNOFF" MEANS ALL INCREASES IN STORM-WATER RESULTING FROM:
 - a) AN INCREASE IN THE IMPERVIOUS OF THE SITE, INCLUDING ALL ADDITIONS TO BUILDINGS, ROADS AND PARKING LOTS;
 - b) CHANGES IN PERMEABILITY CAUSED BY COMPACTION DURING CONSTRUCTION OR MODIFICATIONS IN CONTOURS, INCLUDING THE FILLING OR DRAINAGE OF SMALL DEPRESSION AREAS;
 - c) ALTERATION OF DRAINAGE WAYS, OR REGRADING OF SLOPES;
 - d) DESTRUCTION OF FOREST; OR
 - e) INSTALLATION OF COLLECTION SYSTEMS TO INTERCEPT STREET FLOWS OR TO REPLACE SWALES OR OTHER DRAINAGE WAYS.
- (22) "FOREST" MEANS A BIOLOGICAL COMMUNITY DOMINATED BY TREES AND OTHER WOODY PLANTS COVERING A LAND AREA OF 1 ACRE OR MORE. THIS ALSO INCLUDES FORESTS THAT HAVE BEEN CUT, BUT NOT CLEARED.
- (23) "FOREST INTERIOR DWELLING BIRDS" MEANS SPECIES OF BIRDS WHICH REQUIRE RELATIVELY LARGE FORESTED TRACTS IN ORDER TO BREED SUCCESSFULLY (E.G., VARIOUS SPECIES OF FLYCATCHERS, WARBLERS, VIREOS, AND WOODPECKERS).
- (24) "HIGHLY ERODIBLE SOILS" MEANS THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT; OR THOSE SOILS WITH A K VALUE GREATER THAN 0.35 AND WITH SLOPES GREATER THAN 5 PERCENT.
- (25) "HISTORIC WATERFOWL STAGING AND CONCENTRATION AREA" MEANS AN AREA OF OPEN WATER AND ADJACENT MARSHES WHERE WATERFOWL GATHER DURING MIGRATION AND THROUGHOUT THE WINTER SEASON. THESE AREAS ARE "HISTORIC" IN THE SENSE THAT THEIR LOCATION IS COMMON KNOWLEDGE AND BECAUSE THESE AREAS HAVE BEEN USED REGULARLY DURING RECENT TIMES.

- (26) "HYDRIC SOILS" MEANS SOILS THAT ARE WET FREQUENTLY ENOUGH TO PERIODICALLY PRODUCE ANAEROBIC CONDITIONS, THEREBY INFLUENCING THE SPECIES COMPOSITION OR GROWTH, OR BOTH, OF PLANTS ON THOSE SOILS.
- (27) "HYDROPHYTIC VEGETATION" MEANS THOSE PLANTS CITED IN "VASCULAR PLANT SPECIES OCCURRING IN MARYLAND WETLANDS" (DAWSON, F. ET AL., 1985) WHICH ARE DESCRIBED AS GROWING IN WATER OR ON A SUBSTRATE THAT IS AT LEAST PERIODICALLY DEFICIENT IN OXYGEN AS A RESULT OF EXCESSIVE WATER CONTENT (PLANTS TYPICALLY FOUND IN WATER HABITATS).
- (28) "INCLUDES" MEANS INCLUDES OR INCLUDING BY WAY OF ILLUSTRATION AND NOT BY WAY OF LIMITATION.
- (29) "K VALUE" MEANS THE SOIL ERODIBILITY FACTOR IN THE UNIVERSAL SOIL LOSS EQUATION. IT IS A QUANTITATIVE VALUE THAT IS EXPERIMENTALLY DETERMINED.
- (20) "LAND-BASED AQUACULTURE" MEANS THE RAISING OF FISH OR SHELLFISH IN ANY NATURAL OR MAN-MADE, ENCLOSED OR IMPOUNDED, WATER BODY.
- (31) "LAND CLEARING" MEANS ANY ACTIVITY THAT REMOVES THE VEGETATIVE GROUND COVER.
- (32) "LANDFORMS" MEANS FEATURES OF THE EARTH'S SURFACE CREATED BY NATURAL CAUSES.
- (33) "MARINA" MEANS ANY FACILITY FOR THE MOORING, BERTHING, STORING, OR SECURING OF WATERCRAFT, BUT NOT INCLUDING COMMUNITY PIERS AND OTHER NON-COMMERCIAL BOAT DOCKING AND STORAGE FACILITIES.
- (34) "MEAN HIGH TIDE" MEANS THE AVERAGE HEIGHT OF ALL THE DAILY HIGH TIDES RECORDED OVER A SPECIFIED PERIOD AT A GIVEN LOCATION.
- (35) "NATURAL HERITAGE AREA" MEANS ANY COMMUNITIES OF PLANTS OR

ANIMALS WHICH ARE CONSIDERED TO BE AMONG THE BEST STATEWIDE EXAMPLES OF THEIR KIND, AND ARE DESIGNATED BY REGULATION BY THE SECRETARY OF THE DEPARTMENT OF NATURAL RESOURCES.

- (36) "NATURAL VEGETATION" MEANS THOSE PLANT COMMUNITIES THAT DEVELOP IN THE ABSENCE OF HUMAN ACTIVITIES.
- (37) "NATURE-DOMINATED" MEANS A CONDITION WHERE LANDFORMS OR BIOLOGICAL COMMUNITIES, OR BOTH, HAVE DEVELOPED BY NATURAL PROCESSES IN THE ABSENCE OF HUMAN INTERVENTION.
- (38) "NATURAL FEATURES" MEANS COMPONENTS AND PROCESSES PRESENT IN OR PRODUCED BY NATURE, INCLUDING BUT NOT LIMITED TO, SOIL TYPES, GEOLOGY, SLOPES, VEGETATION, SURFACE WATER, DRAINAGE PATTERNS, AQUIFERS, RECHARGE AREAS, CLIMATE, FLOOD PLAINS, AQUATIC LIFE, AND WILDLIFE.
- (39) "NATURAL PARKS" MEANS AREAS OF NATURAL HABITAT THAT PROVIDE OPPORTUNITIES FOR THOSE RECREATIONAL ACTIVITIES THAT ARE COMPATIBLE WITH THE MAINTENANCE OF NATURAL CONDITIONS.
- (40) "NON-POINT SOURCE POLLUTION" MEANS POLLUTION GENERATED BY DIFFUSE LAND USE ACTIVITIES RATHER THAN FROM AN IDENTIFIABLE OR DISCRETE FACILITY. IT IS CONVEYED TO WATERWAYS THROUGH NATURAL PROCESSES, SUCH AS RAINFALL, STORM RUNOFF, OR GROUNDWATER SEEPAGE RATHER THAN BY DELIBERATE DISCHARGE. NON-POINT SOURCE POLLUTION IS NOT GENERALLY CORRECTED BY "END-OF-PIPE" TREATMENT, BUT RATHER, BY CHANGES IN LAND MANAGEMENT PRACTICES.
- (41) "NON-RENEWABLE RESOURCES" MEANS RESOURCES THAT ARE NOT NATURALLY REGENERATED OR RENEWED.
- (42) "NON-TIDAL WETLANDS" MEANS THOSE LANDS IN THE CRITICAL AREA, EXCLUDING TIDAL WETLANDS REGULATION UNDER TITLE 9 OF THE NATURAL RESOURCES ARTICLE, ANNOTATED CODE OF MARYLAND, WHERE THE WATER TABLE IS USUALLY AT OR NEAR THE SURFACE, OR LANDS WHERE THE SOIL OR SUBSTRATE IS COVERED BY SHALLOW WATER AT SOME TIME DURING THE GROWING SEASON. THESE REGULATIONS APPLY TO THE PALUSTRINE CLASS OF NON-TIDAL WETLANDS AS DEFINED IN "CLASSIFICATION OF WETLANDS AND

DEEPWATER HABITATS OF THE UNITED STATES" (PUBLICATION FWS/OBS-79/31, DECEMBER 1979) AND AS IDENTIFIED ON THE NATIONAL WETLANDS INVENTORY MAPS, OR WHICH MAY BE IDENTIFIED BY SITE SURVEY AT THE TIME OF APPLICATION FOR A DEVELOPMENT ACTIVITY. THESE LANDS ARE USUALLY CHARACTERIZED BY ONE OR BOTH OF THE FOLLOWING:

- a) AT LEAST PERIODICALLY, THE LANDS SUPPORT PREDOMINANTLY HYDROPHYTIC VEGETATION;
 - b) THE SUBSTRATE IS PREDOMINANTLY UNDRAINED HYDRIC SOILS.
- (43) "OFFSETS" MEANS STRUCTURES OR ACTIONS THAT COMPENSATE FOR UNDESIRABLE IMPACTS.
- (44) "OPEN SPACE" MEANS LAND AND WATER AREAS RETAINED IN AN ESSENTIALLY UNDEVELOPED STATE.
- (45) "PALUSTRINE" MEANS ALL NON-TIDAL WETLANDS DOMINATED BY TREES, SHRUBS, PERSISTENT EMERGENT PLANTS, OR EMERGENT MOSSES OR LICHENS AND ALL SUCH WETLANDS THAT OCCUR IN TIDAL AREAS WHERE THE SALINITY DUE TO OCEAN-DERIVED SALTS IS BELOW ONE-HALF PART PER 1,000 PARTS OF WATER.
- (46) "PLANT HABITAT" MEANS A COMMUNITY OF PLANTS COMMONLY IDENTIFIABLE BY THE COMPOSITION OF ITS VEGETATION AND ITS PHYSIOGRAPHIC CHARACTERISTICS.
- (47) "PORT FACILITY" MEANS ANY ONE OR MORE OR COMBINATION OF:
- a. LANDS, PIERS, DOCKS, WHARVES, WAREHOUSES, SHEDS, TRANSIT SHEDS, ELEVATORS, COMPRESSORS, REFRIGERATION STORAGE PLANTS, BUILDINGS, ELEVATORS, COMPRESSORS, REFRIGERATION STORAGE PLANTS, BUILDINGS, STRUCTURES, AND OTHER FACILITIES, APPURTENANCES, AND EQUIPMENT USEFUL OR DESIGNED FOR USE IN CONNECTION WITH THE OPERATION OF A PORT;
 - b. EVERY KIND OF TERMINAL OR STORAGE STRUCTURE OR FACILITY USEFUL OR DESIGNED FOR USE IN HANDLING, STORING, LOADING, OR UNLOADING FREIGHT OR PASSENGERS AT MARINE TERMINALS;

- c. EVERY KIND OF TRANSPORTATION FACILITY USEFUL OR DESIGNED FOR USE IN CONNECTION WITH ANY OF THESE.
- (48) "PRIVATE HARVESTING" MEANS THE CUTTING AND REMOVAL OF TREES FOR PERSONAL USE.
- (49) "PROGRAM" MEANS THE CITY OF BALTIMORE CRITICAL AREA MANAGEMENT PROGRAM.
- (50) "PUBLIC WATER-ORIENTED RECREATION" MEANS SHORE-DEPENDENT RECREATION FACILITIES OR ACTIVITIES PROVIDED BY PUBLIC AGENCIES WHICH ARE AVAILABLE TO THE GENERAL PUBLIC.
- (51) "REDEVELOPMENT" MEANS THE PROCESS OF DEVELOPING LAND WHICH IS OR HAS BEEN DEVELOPED.
- (52) "REFORESTATION" MEANS THE ESTABLISHMENT OF A FOREST THROUGH ARTIFICIAL REPRODUCTION OR NATURAL REGENERATION.
- (53) "RIPARIAN HABITAT" MEANS A HABITAT THAT IS STRONGLY INFLUENCED BY WATER AND WHICH OCCURS ADJACENT TO STREAMS, SHORELINES, AND WETLANDS
- (54) "RUNOFF POLLUTION" MEANS THOSE CONTAMINANTS WHICH ARE CARRIED BY PRECIPITATION THAT FLOWS OVER LAND.
- (55) "SEASONALLY FLOODED WATER REGIME" MEANS A CONDITION WHERE SURFACE WATER IS PRESENT FOR EXTENDED PERIODS, ESPECIALLY EARLY IN THE GROWING SEASON, AND WHEN SURFACE WATER IS ABSENT, THE WATER TABLE IS OFTEN NEAR THE LAND SURFACE.
- (56) "SELECTION" MEANS THE REMOVAL OF SINGLE, SCATTERED, MATURE TREES OR OTHER TREES FROM UNEVEN-AGED STANDS BY FREQUENT AND PERIODIC CUTTING OPERATIONS.
- (57) "SHORE EROSION PROTECTION WORKS" MEANS THOSE STRUCTURES OR MEASURES CONSTRUCTED OR INSTALLED TO PREVENT OR MINIMIZE EROSION OF THE SHORELINE IN THE CRITICAL AREA.
- (58) "SIGNIFICANT DEVELOPMENT" MEANS DEVELOPMENT WHICH: DISTURBS

LAND IN THE BUFFER; DISTURBS 10,000 OR MORE SQUARE FEET OF LAND IN THE CRITICAL AREA; RESULTS IN ANY DISTURBANCE, CAUSED BY USE, DEVELOPMENT, OR DESTRUCTION OF VEGETATION, TO LAND IN AN AREA DESIGNATED UNDER THE CRITICAL AREA MANAGEMENT PROGRAM AS A HABITAT PROTECTION AREA; OR INVOLVES AN EXPENDITURE FOR IMPROVEMENTS TO THE PROPERTY EQUAL TO OR GREATER THAN 50% OF THE ASSESSED VALUE OF THE PROPERTY, AS CERTIFIED BY THE DEPARTMENT OF PLANNING.

- (59) "SIGNIFICANTLY ERODING AREAS" MEANS AREAS THAT ERODE 2 FEET OR MORE PER YEAR.
- (60) "SPECIES IN NEED OF CONSERVATION" MEANS THOSE FISH AND WILDLIFE WHOSE CONTINUED EXISTENCE AS PART OF THE STATE'S RESOURCES ARE IN QUESTION AND WHICH MAY BE DESIGNATED BY REGULATION BY THE SECRETARY OF NATURAL RESOURCES AS IN NEED OF CONSERVATION PURSUANT TO THE REQUIREMENTS OF NATURAL RESOURCES ARTICLE, SECTIONS 10-2A-06 AND 4-2A-03, ANNOTATED CODE OF MARYLAND.
- (61) "STEEP SLOPES" MEANS SLOPES OF 15 PERCENT OR GREATER INCLINE.
- (62) "THINNING" MEANS A FOREST PRACTICE USED TO ACCELERATE TREE GROWTH OF QUALITY TREES IN THE SHORTEST INTERVAL OF TIME.
- (63) "TOPOGRAPHY" MEANS THE EXISTING CONFIGURATION OF THE EARTH'S SURFACE INCLUDING THE RELATIVE RELIEF, ELEVATION, AND POSITION OF LAND FEATURES.
- (64) "TRANSITIONAL HABITAT" MEANS A PLANT COMMUNITY WHOSE SPECIES ARE ADAPTED TO THE DIVERSE AND VARYING ENVIRONMENTAL CONDITIONS THAT OCCUR ALONG THE BOUNDARY THAT SEPARATES AQUATIC AND TERRESTRIAL AREAS.
- (65) "TRANSPORTATION FACILITIES" MEANS ANYTHING THAT IS BUILT, INSTALLED, OR ESTABLISHED TO PROVIDE A MEANS OF TRANSPORT FROM ONE PLACE TO ANOTHER.
- (66) "TRIBUTARY STREAMS" MEANS THOSE PERENNIAL AND INTERMITTENT STREAMS IN THE CRITICAL AREA WHICH ARE SO NOTED ON THE MOST RECENT U.S. GEOLOGICAL SURVEY 7 1/2 MINUTE TOPOGRAPHIC

QUADRANGLE MAPS (SCALE 1:24,000) OR ON MORE DETAILED MAPS OR STUDIES AT THE DISCRETION OF THE LOCAL JURISDICTIONS.

- (67) "UTILITY TRANSMISSION FACILITIES" MEANS FIXED STRUCTURES THAT CONVEY OR DISTRIBUTE RESOURCES, WASTES, OR BOTH, INCLUDING, BUT NOT LIMITED TO, ELECTRIC LINES, WATER CONDUITS, AND SEWER LINES.
- (68) "WATER-DEPENDENT FACILITY" MEANS THOSE STRUCTURES OR WORKS ASSOCIATED WITH INDUSTRIAL, MARITIME, RECREATIONAL, EDUCATIONAL, OR FISHERIES ACTIVITIES THAT REQUIRE LOCATION AT OR NEAR THE SHORELINE WITHIN THE BUFFER SPECIFIED IN COMAR 27.01.09.
- (69) "WATER-USE INDUSTRY" MEANS AN INDUSTRY THAT REQUIRES LOCATION NEAR THE SHORELINE BECAUSE IT UTILIZES SURFACE WATERS FOR COOLING OR OTHER INTERNAL PURPOSES.
- (70) "WATERFOWL" MEANS BIRDS WHICH FREQUENT AND OFTEN SWIM IN WATER, NEST AND RAISE THEIR YOUNG NEAR WATER, AND DERIVE AT LEAST PART OF THEIR FOOD FROM AQUATIC PLANTS AND ANIMALS.
- (71) "WILDLIFE CORRIDOR" MEANS A STRIP OF LAND HAVING VEGETATION
- (72) "WILDLIFE HABITAT" MEANS THOSE PLANT COMMUNITIES AND PHYSIOGRAPHIC FEATURES THAT PROVIDE FOOD, WATER AND COVER, NESTING, AND FORAGING OR FEEDING CONDITIONS NECESSARY TO MAINTAIN POPULATIONS OF ANIMALS IN THE CRITICAL AREA.

XII. CRITICAL AREA SECTION FROM THE ZONING CODE OF BALTIMORE CITY

TITLE 8. OVERLAY DISTRICTS

SUBTITLE 3. CRITICAL AREA OVERLAY DISTRICT

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SUBTITLE 3
CRITICAL AREA OVERLAY DISTRICT

PART I. DEFINITIONS; OVERVIEW

§ 8-301. Definitions.

(a) *In general.*

In this subtitle, the following terms have the meanings indicated.
(*Ord. 99-547.*)

(b) *Buffer.*

(1) *In general.*

“Buffer” means an existing naturally vegetated area or vegetated area established or managed to protect aquatic, wetland, shoreline, and terrestrial environments from man-made disturbance.

(2) *Establishment.*

The Buffer shall be established 100 feet landward from the mean high waterline of tidal waters and the landward edge of tidal wetlands and tributary streams.

(3) *Configuration; filling.*

For purposes of configuring the Critical Area Buffer, the 100 feet landward of the mean high waterline is measured at the 2-foot contour as it existed on December 4, 1987. All new lands created as a result of filling after January 4, 1988, become additional Buffer areas, and the Buffer line configured before the filling remains unchanged for purposes of determining Buffer offset requirements.

(*City Code, 1976/83, art. 30, §13.0-2-9a.*) (*Ord. 99-547; Ord. 02-350.*)

(c) *Critical Area.*

“Critical Area” means all parts of the Chesapeake Bay Critical Area, as delineated in and modified by the City in accordance with § 8-1807 of the State Natural Resources Article, that fall within City boundaries.

(*City Code, 1976/83, art. 30, §13.0-2-20a.*) (*Ord. 99-547.*)

(d) *Critical Area Management Program.*

“Critical Area Management Program” means the Baltimore City Critical Area Management Program, as approved by the Chesapeake Bay Critical Area Commission and adopted by Resolution of the Mayor and City Council of Baltimore.

(City Code, 1976/83, art. 30, §13.0-2-20b.) (Ord. 99-547.)

(e) Development.

“Development” means any one or combination of the following:

- (1) construction, reconstruction, modification, or expansion of structures;
- (2) placement of fill;
- (3) dredging;
- (4) drilling;
- (5) mining;
- (6) grading;
- (7) paving;
- (8) land excavation;
- (9) land clearing;
- (10) land improvement; or
- (11) storage of materials.

(City Code, 1976/83, art. 30, §13.0-2-23a.) (Ord. 99-547.)

(f) Significant development.

“Significant development” means any development that would:

- (1) disturb land in the Buffer;
- (2) disturb 10,000 or more square feet of land in the Critical Area;
- (3) result in any disturbance, caused by use, development, or destruction of vegetation, to land in an area designated under the Critical Area Management Program as a Habitat Protection Area; or
- (4) involve an expenditure for improvements to the property equal to or greater than 50% of the assessed value of the property, as certified by the Department of Planning.

(City Code, 1976/83, art. 30, §13.0-2-42.5, §13.0-2-87a.) (Ord. 99-547; Ord. 02-350.)

(g) *Water-dependent facilities.*

(1) *In general.*

“Water-dependent facilities” means land uses or structures that:

- (i) are associated with industrial, maritime, recreational, educational, or fisheries activities;
- (ii) require a location within the Buffer near the shoreline; and
- (iii) are dependent on the water by reason of the intrinsic nature of their operation.

(2) *Inclusions.*

“Water-dependent facilities” include:

- (i) ports;
- (ii) intake and outfall structures of power plants;
- (iii) water-use industries;
- (iv) marinas and other boat-docking structures;
- (v) public beaches and water-oriented recreation areas; and
- (vi) fisheries.

(3) *Exclusions.*

“Water-dependent facilities” do not include private piers that are installed and maintained by riparian landowners and are not part of a subdivision that provides community piers.

(City Code, 1976/83, art. 30, §13.0-2-98a.) (Ord. 99-547; Ord. 02-350.)

§ 8-302. Design.

The Critical Area Overlay District is designed to foster more sensitive, consistent, and uniform development and redevelopment activity along the City’s shoreline areas of the Chesapeake Bay and its tributaries, so as to minimize damage to water quality and natural or established habitats for the benefit of current and future generations.

(City Code, 1976/83, art. 30, ch. 3C(intro)(1st par.).) (Ord. 99-547.)

§ 8-303. Critical Area and Buffer.

(a) *Critical Area.*

The Chesapeake Bay Critical Area Act (Title 8, Subtitle 18 of the State Natural Resources Article) requires that the City designate as its Critical Area an area that consists of, at a minimum:

- (1) all waters of and land under the Chesapeake Bay and its tributaries to the head of the tide, as indicated on the State Wetland Maps;
- (2) all State and private wetlands designated under Title 9 of the Natural Resources Article; and
- (3) all land and water areas within 1,000 feet beyond the landward boundaries of state or private wetlands and the heads of the tides.

(b) *Buffer.*

- (1) The Buffer shall be expanded beyond 100 feet to include contiguous sensitive areas, such as steep slopes, hydric soils, or highly erodible soils, whose development or disturbance may impact streams, wetlands, or other aquatic environments.
- (2) In the case of contiguous slopes of 15% or greater, the Buffer shall be expanded 4 feet for every 1% of slope or to the top of the slope, whichever is greater in extent. (*City Code, 1976/83, art. 30, ch. 3C(intro)(2nd par.).*) (*Ord. 99-547; Ord. 02-350.*)

§ 8-304. Development Areas.

(a) *In general.*

The State regulations that implement the Critical Area Law also require that the City designate “Development Areas” within the Critical Area, based generally on existing development patterns and densities.

(b) *Types designated.*

The 2 types of Development Areas specified in the Critical Area Management Program are:

- (1) Resource Conservation Areas.
- (2) Intensely Developed Areas, which comprise 2 subareas:
 - (i) Waterfront Revitalization Areas.
 - (ii) Waterfront Industrial Areas.

(City Code, 1976/83, art. 30, ch. 3C(intro)(2nd par.), §13.0-2-23b(2nd sen.).) (Ord. 99-547; Ord. 02-350.)

§ 8-305. Boundaries.

(a) *As delineated on maps.*

The Critical Area Buffer and Development Area boundaries are delineated on a series of maps maintained by the Baltimore City Department of Planning. These maps may be periodically revised with the approval of the Planning Commission and the Chesapeake Bay Critical Area Commission.

(b) *Other depictions illustrative only.*

Any other representation of the Critical Area or its Development Areas, regardless of the source of publication, are illustrative only and may not be used for determining any of the development requirements or restrictions required in this subtitle or by the Baltimore City Critical Area Management Program.

(City Code, 1976/83, art. 30, ch. 3C(intro)(3rd par.).) (Ord. 99-547.)

§§ 8-306 to 8-307. {Reserved}

PART II. GENERAL REQUIREMENTS

§ 8-308. In general.

In addition to the general provisions of Title 3 {“General Rules”} of this article, the following provisions apply to Critical Area Overlay District.
(Ord. 99-547.)

§ 8-309. General use regulations.

(a) *Permitted uses.*

Permitted uses are as set forth in Part III of this subtitle for each type of Development Area.

(b) *Conditional uses.*

Conditional uses are as set forth in Part III of this subtitle for each type of Development Area.

(c) *Nonconforming uses.*

Any expansion made after January 3, 1988, to a nonconforming use in the Critical Area Overlay District must comply with the development requirements of Section III of the

Critical Area Management Program if the Department of Planning determines it to be a significant development.
(*City Code, 1976/83, art. 30, §3C.0-1a, 1b, 1c(2nd par.).) (Ord. 99-547.)*

§ 8-310. Prohibited uses.

(a) *Within Critical Area.*

Except as specified in subsection (c) of this section, the following uses are prohibited within the Critical Area:

- (1) Solid or hazardous waste collection or disposal facilities.
- (2) Sanitary landfills.
- (3) Materials recovery facilities.
- (4) Waste disposal (except garbage) for land fill and land reclamation
- (5) Junk or scrap storage and yards.
- (6) Radioactive waste handling.
- (7) Incinerators: commercial or municipal.
- (8) Recycling collection stations.
- (9) Transfer stations.
- (10) Hazardous material: handling and storage.

(b) *Within Buffer.*

Except as specified in subsection (c) of this section, the following additional uses are prohibited within the Buffer:

- (1) Storage facilities for toxic or hazardous substances (as those terms are defined in COMAR 11.07.01.01A) or nutrients (that is, elements or compounds essential as raw material for organic growth and development; for example, carbon, nitrogen, and phosphorus).
- (2) Open storage facilities for any bulk solid or semi-solid material that is a toxic or hazardous substance or nutrient or that becomes one when left to stand or exposed to water.

(3) Outdoor facilities for the maintenance, storage, or dismantling of abandoned, unlicensed, junked, or derelict vehicles.

(4) Sand or gravel operations.

(5) Cement plants.

(6) Chemical plants.

(7) Non-water-dependent structures on:

(i) piers; or

(ii) barges or other non-self-propelled vessels (other than historic vessels used as museums).

(8) As specified in § 3-107 {“Prohibited uses”} of this article.

(c) *Exceptions.*

The prohibitions in subsections (a) and (b) of this section do not apply if:

(1) on recommendation of the Department of Planning, the Board finds that:

(i) there is no environmentally acceptable alternative outside the Critical Area; and

(ii) the use is needed to correct an existing water quality or wastewater management problem; and

(2) for any new use that constitutes a significant development or for any expansion of a nonconforming use, a best management practices plan that will achieve a net improvement in water quality is submitted and implemented as a requirement of the Critical Area review process.

(City Code, 1976/83, art. 30, §3C.0-1d1, 1d2, 1d4 to 1d6, 1e, 1f.) (Ord. 99-547; Ord. 02-350.)

§ 8-311. Water-dependant facilities within Buffer.

(a) *Intensely Developed Areas.*

Water-dependent facilities are allowed in the Buffer in Intensely Developed Areas only if:

(1) the use and project meet a recognized private right or public need;

(2) adverse effects on water quality and on fish, plant, and wildlife habitats are minimized;

(3) to the extent possible, all associated non-water-dependent uses and structures are located outside the Buffer; and

(4) the facilities meet the requirements of the Critical Area Management Program, the Critical Area Development Manual, and the State law and regulations governing the Critical Area.

(b) *Resource Conservation Areas.*

Except as otherwise specifically provided in § 8-317 of this subtitle, water-dependent facilities are prohibited in Resource Conservation Areas.

(City Code, 1976/83, art. 30, §3C.0-1g.) (Ord. 99-547; Ord. 02-350.)

§ 8-312. Public utility and government services.

Notwithstanding any other provision to the contrary, every significant development of public utilities or governmental services within the Critical Area is subject to the special requirements and restrictions of the Critical Area Management Program.

(City Code, 1976/83, art. 30, §3C.2-1.) (Ord. 99-547.)

§ 8-313. Abandoned uses.

Any use that is discontinued for 12 consecutive months:

(1) is considered abandoned; and

(2) may not be reestablished in the Critical Area unless, on recommendation of the Department of Planning, the Board finds that the use complies with the Critical Area Management Program.

(City Code, 1976/83, art. 30, §3C.0-1h.) (Ord. 99-547.)

§ 8-314. Bulk regulations.

The standards set forth in this article for each underlying district apply to properties in the Critical Area Overlay District.

(City Code, 1976/83, art. 30, §3C.0-2.) (Ord. 99-547.)

§§ 8-315 to 8-316. {Reserved}

PART III. DEVELOPMENT AREA REQUIREMENTS

§ 8-317. Resource Conservation Area.

(a) *Permitted uses within Critical Area.*

In a Resource Conservation Area within the Critical Area but outside the Buffer, permitted uses are as follows:

Non-profit or publicly-owned open space, natural parks, pedestrian easements, promenades, bike paths, cultural and historic sites, and educational facilities.

(b) *Permitted uses within Buffer.*

In a Resource Conservation Area within the Buffer, permitted uses are as follows:

Areas for passive recreation, such as nature study and education – but service facilities for these areas must be located outside of the Buffer.

(c) *Accessory and conditional uses within Critical Area.*

In a Resource Conservation Area within the Critical Area or Buffer, accessory and conditional uses are as follows:

None.

(City Code, 1976/83, art. 30, §3C.1-1.) (Ord. 99-547; Ord. 02-350.)

§ 8-318. Intensely Developed Areas - Waterfront Revitalization Subarea.

(a) *Permitted, accessory, and conditional uses within Critical Area.*

In a Waterfront Revitalization Area within the Critical Area but outside the Buffer, permitted, accessory, and conditional uses are as follows:

As otherwise provided in this article for the underlying zoning district, subject to the provisions of § 8-310 {“Prohibited uses”} of this subtitle.

(b) *Permitted, accessory, and conditional uses within Buffer.*

In a Waterfront Revitalization Area within the Buffer, permitted, accessory, and conditional uses are as follows:

As otherwise provided in this article for the underlying zoning district, subject to the provisions of § 8-310 {“Prohibited uses”} and § 8-311 {“Water-dependent facilities within Buffer”} of this subtitle.

(City Code, 1976/83, art. 30, §3C.1-2.) (Ord. 99-547; Ord. 02-350.)

§ 8-319. Intensely Developed Areas - Waterfront Industrial Subarea.

(a) *Permitted, accessory, and conditional uses within Critical Area.*

In a Waterfront Industrial Area within the Critical Area but outside the Buffer, permitted, accessory, and conditional uses are as follows:

As otherwise provided in this article for the underlying zoning district, subject to the provisions of § 8-310 {"Prohibited uses"} of this subtitle.

(b) *Permitted, accessory, and conditional uses within Buffer.*

In a Waterfront Industrial Area within the Buffer, permitted, accessory, and conditional uses are as follows:

As otherwise provided in this article for the underlying zoning district, subject to the provisions of § 8-310 {"Prohibited uses"} and § 8-311 {"Water-dependent facilities within Buffer"} of this subtitle.

(City Code, 1976/83, art. 30, §3C.1-3.) (Ord. 99-547; Ord. 02-350.)

§§ 8-320 to 8-321. {Reserved}

PART IV. ADMINISTRATION

§ 8-322. Conditional uses and variances.

(a) *In general.*

In addition to the requirements of Title 14 {"Conditional Uses"} and Title 15 {"Variances"} of this article, the standards and procedures of this section apply to any conditional use or variance in the Critical Area.

(b) *Findings — Planning Department.*

The Planning Department must find that:

- (1) special conditions or circumstances exist that are peculiar to the land or structure for which the application is made; and
- (2) a literal enforcement of the requirements of the Critical Area Management Program would result in unwarranted hardship.

(c) *Findings — Board.*

In addition, the Board must find that:

- (1) a literal interpretation of the Critical Area Management Program, the State Chesapeake Bay Critical Area law, or related regulations will deprive the

applicant of rights commonly enjoyed by other properties in similar areas within the Critical Area;

(2) the granting of a conditional use or variance will not confer on the applicant any special privilege that would be denied under the Critical Area Management Program, the Chesapeake Bay Critical Area law, or related regulations to other lands or structures within the Critical Area;

(3) the application for the conditional use or variance:

(i) is not based on conditions or circumstances that are the result of the applicant's own actions; and

(ii) does not arise from any condition that relates to a land or building use, whether nonconforming or otherwise allowed, on any neighboring property;

(4) the granting of a conditional use or variance will not adversely affect water quality or adversely impact fish, wildlife, or plant habitats within:

(i) the Critical Area;

(ii) a Resource Conservation Area; or

(iii) any other protected part of the State Chesapeake Bay Critical Area within a neighboring jurisdiction; and

(5) the granting of a conditional use or variance will be in harmony with the general spirit and intent of the Critical Area Management Program, the State Chesapeake Bay Critical Area law, and related regulations.

(d) *Application copies to Planning and Critical Area Commission.*

All applications for a conditional use or variance must be made in writing to the Board, and the Board must furnish copies of all applications to the Planning Department and the Chesapeake Bay Critical Area Commission.

(City Code, 1976/83, art. 30, §3C.2-2.) (Ord. 99-547.)